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A
T R E A T I S E
ON THE
COLICA PICTONUM;
OR THE
D R Y B E L L Y - A C H.

By T. Tronchin

By RALPH SCHOMBERG, M. D. of BATH.
Fellow of the Society of ANTIQUARIES.

—— *In nervos huic Morbus & Artus*

Ibat ——

Lucret. B. vi. ver. 1204.

L O N D O N,
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MDCCLXIV.



IN TESTIMONY OF
THE SINCEREST ESTEEM,
AND OF
THE MOST PROFOUND RESPECT,
THIS TREATISE

Is humbly inscribed to

That shining Ornament of his Profession

THE

Very Excellent and Learned Physician

Dr. JOHN HUXHAM,

BY HIS AFFECTIONATE AND MOST

OBLIGED SERVANT

Bath, March 5, 1764.

RALPH SCHOMBERG.

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P R E F A C E.

THE following treatise was written in Latin by Dr. TRONCHIN, a very learned and able Physician, who resided many years at *Amsterdam*, where he practised with great success and reputation: he is now returned to *Geneva*, the place of his nativity, and lives highly respected by all men of letters, and much esteemed by his fellow citizens, as an honour to his country and to his profession.

I have taken the liberty to make some few additions, and used my best endeavours to give the *translation* the air of an *original*, not
from

P R E F A C E.

from a vain desire of decorating myself with the plumage of others, but to make it as acceptable as I could to my readers; how far I have had the happiness to succeed, must be submitted to their decision.

A TREA-

C H A P. I.

*Of the Belly-ach, when and whence
called the COLIC.*

OF all the diseases which the human body is subject to, there is none perhaps attended with such excruciating pains, with so many perplexing symptoms, and with such a variety of dreadful and fatal consequences, as the *Belly-ach*. This disorder is not always seated in the same part of the abdomen; it sometimes attacks the loins, ilia; often the navel, but most commonly the COLON; hence it is called the *Colic*.

Though *Hippocrates* has not distinguished this disease by any particular name, he was, nevertheless, most undoubtedly acquainted with it:—gripings of the belly, αλγηνμα περι ομφαλον, and pains
B about

about the navel, frequently occur in his writings.

Diocles Caristius, a celebrated physician, who lived a few years after *Hippocrates*, and was so eminent, that the Athenians distinguished him by the name of *Hippocrates the Second*, calls the disorders of the thin intestine χορδαλον of the thicker ειλεον—as may be seen in *Celsus de Medicina*, book iv. chapter 13—.

Cassius, however, whom *Celsus* calls the most ingenious physician of his time, was the first, so far as we can tell, who gave this distemper the name it is now known by, the *Colic*; and valued himself greatly on his having invented a remedy, which he called κολικον; the form of which is still preserved in *Celsus*, book v. chapter 25.

In the days of *Celsus* the disorder of the thin intestine was called ειλεος, and of the thick gut, κολικος——*Galen* has also distinguished it in the same man-

ner; and *Cælius Aurelianus*, in his description of this disease, speaks greatly in favour of the remedies prescribed for it by *Themison*, a physician who flourished under *Augustus Cæsar*.

Philo of *Tarsus*, who was cotemporary with *Themison*, much commends his favourite *Philonium* in this disease. This will evidently prove *Pliny's* mistake, when he says the *Colic* appeared for the first time amongst the *Romans* in the reign of *Tiberius*, and that, that emperor was the first person who felt its influence, which occasioned no small doubts in the senate and in the city, as they had never heard of such a distemper, and consequently concluded *Tiberius* made it an excuse for his non-appearance at a time when some publick affairs which were to be discussed, demanded his presence. See book xxvi. chap. i.

In this manner has the belly-ach; first called the *Colic* by *Cassius*, retained its

4 COLICA PICTONUM; or,
name; *Galen* adopted it, and the most
eminent physicians since his time have
continued it down to us.

C H A P. II.

The Colic, when and why called of
POICTOU.

THE gripings of the belly, and
pains about the navel, as men-
tioned by Hippocrates, and after him in-
discriminately called *Colics*, and at length
divided into different species, were dis-
tinguished by various appellations; and
even received their name from the coun-
tries in which they appeared most to
rage.

Thus, for example, this *Colic* making
great devastation among the inhabitants
of *Poictou*, about the year 1572, was by
F. Citefius, a physician of that province,
(who

(who wrote a professed discourse upon this disease) called the *Colica Pictonum*.

This name, being once established, became universally received, though it equally attacked the inhabitants of *Bretagne*, *Santonge*, *Engoulesme*, the whole of *Aquitain*, as well as the province of *Poitou*.

P. Droet assures us it raged all over *Picardy*: and in a letter written by *Langius*, treating of gripings of the belly in consequence of fevers, it appears that the same distemper was felt in *Moravia*, *Silesia*, and through the greatest part of *Lower Germany*: and by another letter of *Crato's*, who was physician to the emperors *Ferdinand I.* *Maximilian II.* and *Rodolph II.* it is also evident that it was then known about the year 1582; for he there mentions a *palsy* happening in consequence of a *Colic*.

C H A P. III.

The COLICA PICTONUM described.

THOSE, who were seized with this disorder seemed, from the suddenness of the attack, to be planet-struck; they became pale, cold at the extremities, lost their strength, being uneasy both in body and mind, restless, languid, and heart-burnt, attended with loss of appetite, nausea, belching, æruginous and bilious vomitings, hiccup, thirst, strangury, burning heat of the hypochondria, sometimes without, but more frequently with a slow fever.

The patients complained of a most acute pain of the stomach, bowels, loins, and ilia; sometimes, especially in the beginning, the stools were frequent, tho' not copious; but in general they were very costive. The distemper encreasing,
affected

affected the shoulders, arms, breast, and the whole thorax, with an intense pain; some even complained most grievously of the soles of their feet, altho' they could move them tolerably well. The pains at length remitting, and the poor patients thinking themselves entirely secure, became suddenly paralytic in their arms and legs, their motion being totally destroyed, though their senses remained unimpaired.

C H A P. IV.

*This Colic often described before
Citefius his time.*

PAULUS ÆGINETA, who flourished in the year of CHRIST 420, or, as some others think, about the year 380, says, “ In our times a certain *Colic* attacked people, which was attended with a total deprivation of motion in the limbs, more especially in such as survived the complaint: the sense of feeling, however, remained entire; and they by degrees recovered their activity again.”

This same author in another place, treating of this distemper, observes a pestilential *Colic*, as it were, to have terminated, by a seeming unknown fascination, in some patients in an epilepsy, in others in a palsy, the senses nevertheless remaining uninjured; those who became epileptic generally died, the paralytic mostly recovered.

HALY

HALY ABBAS, an *Arabian* physician, who lived in 1122, has also described this *Colic*. “It often happens, says he, that some limbs become weak and useless, and the distemper terminates critically—I have seen some, who after violent pains of the *Colic*, lost the use of both their knees, in others one knee and one hip only seemed to be affected: I have seen others whose scapulæ became entirely motionless; the senses however continued uninterrupted.”

AVICENNA, the son of HALY ABBAS, who lived in 1145, or, in the opinion of others, 1165, remarks, that this *Colic* often is succeeded by a palsy, and is again cured by it—and is in like manner relieved by pains of the joints.—In another place, he says, the patient feels a violent pricking pain, as if the belly were pierced with a sharp-pointed instrument; in a standing posture they complain as if a needle were hid in their bowels, and

upon the least motion perceive a most intense pain, become very thirsty, unsatisfied with any drink, though taken in large and repeated quantities ; for whatever they drink passes not to the liver, because of the obstructed orifices of the mesaraic vessels——Those who have the *Colic* discharge fæces, like those of birds or goats, in little round pellets——have bilious vomitings, because the bile is prevented from passing through the intestines, and must therefore necessarily be discharged upwards.

The *Colic*, says *Constantinus Africanus*, who flourished in 1080, is a violent pain in the intestine *Colon*, occasioned by gross phlegmatic humours lodged within the coats of that bowel, arising from some sharp acrimony——The bowels seem as it were transfix'd by some sharp-pointed instrument.—It is necessary to know how it comes to pass that the *Colic* should be succeeded by pains of the articulations.

John

John a Gadesden, who flourished about the year 1300, observes, that the *Colic* sometimes terminates in a palsy, sometimes in a pain of the joints, at other times it ends in an epilepsy.

Fernelius, a *French* physician, who lived in 1506, remarks, that there frequently happen violent pains, which, from their appearance and virulence, are called *Colics*, and yet are not seated in the *Colon*, but in the peritonæum, or in the membranes, which serve as a covering to the abdomen and other parts of the belly; these are very grievous, and indeed lasting complaints, and which yield to no medicines, fomentations, clysters, or any such remedies as other colics generally do; they arise from a light flatus, or from a very acrid æruginous humour lodged within the cavity of the membranes, from which they can hardly be removed.

James Holler, a *Parisian* physician of great eminence about 1560, agrees with
the

the antients in the same thing, when he observes a palsy succeeds the *Colic*; “ And tho’ this seldom happens, says he, with us Parisians, it does so more frequently with the *Britons*. A certain priest, aged forty, became paralytic in consequence of violent and constant *Colic* pains, of which he was cured; but the palsy held him some years after.

This will evince us of *Riolanus* his mistake, where he accuses *Citesius* for affirming that this *Colic* was unknown to the *Parisian* physicians before the time of *Milo*, who was physician to *Henry IV.* for *Citesius* knew, both from *Fernel* and *Holler*, that this pain, which was described by the name of *Bastard Colic*, terminated in a palsy. This disease, as *Riolanus* himself remarks, had been for many years endemic in *Paris* and *Melun*, and known to the physicians before *Citesius*.

Salmasius,

Salmasius, being attacked with this *Colic* at *Paris*, could by no means get any satisfactory account from his physicians with regard to the name of his disease, though they seemed very attentive in exploring its symptoms. *Citesius* pronounced it to be the COLICA PICTONUM, and recovered his patient. At this time, as in that of *Salmasius*, there are, no doubt, physicians who scarcely know this disorder even by its name.

The *Colic*, says *Droet*, was indeed epidemic and fatal this year; for all persons, who were seized with it, became paralytic or *epileptic*; of which number not a few died, either in the beginning of the disease, or a little while after, as appeared in several hospitals and monasteries, the nuns of which were obliged to save themselves by flight and change of situation. This raging tyrant attacked our citizens only, for fifteen years together: last winter, however, it paid a visit in the neighbourhood

neighbourhood of us, and was severely felt at *Abbeville* in the year 1554.

Forestus, a physician of *Alcmar*, and who flourished in 1545, tells us, that in the year 1559 a magistrate of *Leyden*, troubled with perpetual *Colic* pains, was seized with extreme watchings, and a contraction of the nerves; clysters, anodynes, and quieting medicines, availed nothing: the pain, however, went off; but the contraction of his arms and legs continued. He farther relates the case of a person at *Alcmar* who had violent *Colic* pains, which, though they remitted, still left a palsy in the hands; the pain returned on the slightest occasion; the palsy, however, never was got the better of.

Platerus, a physician of *Basil* in 1557, observes that the iliac pain, as it is commonly called, though in reality it is the *Colic*, when it becomes violent and of long standing, and brings on a train of formidable

formidable symptoms, arises (as long experience and certain signs convince us) from the bile's being lodged in the very substance of the intestines, which it vellicates, tears, and burns.—This, continuing for any considerable time, or a fresh discharge of it still encreasing, brings on these obstinate durable pains, which, though they may sometimes seem to remit, return again.—These violent disorders greatly injure and disturb the intestines, which are extremely nervous, more especially when the bile reaches to the spine of the bone, and near that part of it where the intestines adhere by the intermediation of the mesentery, and affects the spinal marrow—the consequence of which are convulsions and palsy.

Ballonius says it is impossible to express how subject the lower venter is to pain, which yields to no glysters, and is aggravated by violent medicines. *Fernelius*

was the first author in our days, who observed that pains very frequently occurred, which, from their similarity and violence, were called *colical*, yet were nevertheless not seated in the colon ; but either in the peritonæum, or in the membranes about the abdomen and other parts of the lower venter, and which neither clysters nor other medicines could remove.

Spigelius, a physician of great eminence at *Brussels*, born in 1578, affirms, that he knew many learned men in the profession, who were not at all acquainted with this disorder : It sometimes, says he, attacks the navel downward, sometimes upwards, round about it, or transversely towards the ilia and loins ; at other times it seizes the whole belly :—and again, the pain extends itself above the navel and about the stomach, then transversely, binding and pressing the hypochondria like a girdle.—The patient is costive ; the first clyster brings off some
fæces

fæces from the rectum, but the second, nothing more than a mucus dislodged from the inner coat of the rectum. A certain sense of weight or uneasiness, which, nevertheless, is not attended with pain, is a sure sign of a relapse; and this becomes more and more troublesome about the loins, and transverse epigastric region, after eating especially.—

The urine is acrid and sharp, as it is in people subject to the stone, which disorder it frequently is taken for, as it is attended with a pain in the loins and with a vomiting. The patients moreover complain of a bitterness in the mouth, are thirsty, and have no appetite; the pulse is strong and full, attended with inward subsultus or catchings, tremors, watching, a heat of the præcordia, together with a continued low fever—which, if it be of too long a duration, brings on a consumption, and this is preceded, attended,

C

and

and succeeded by epilepsies, apoplexies, palsies, and convulsions.

The Colic and Palsy, says *Roderic Fonseca*, a *Portuguese* physician, are very nearly allied; the transition from the one to the other is very easy : and in *Germany* it most frequently happens, that a palsy succeeds the *Colic*.

James Cahagnesi, a physician of *Caen* in *Normandy*, published a small work in 1596, entitled, *A Short and Easy Method to cure Fevers* ; at the close of which he has given a chapter upon the COLICA PICTONUM.

Sennertus, a very eminent physician and professor of physick at *Witteberg*, assures us, that in the spring of the year 1621, such a *Colic* became very epidemic in the dutchy of *Teschin* in *Silesia*. It came on with a violent pain of the head, which was succeeded by pains of the back, feet, and all the extremities; the body was so costive as to resist all purges,

purges, and if a stool did chance to come away, the belly became more bound, attended with total loss of appetite, and vomiting. It sometimes ended in a rheumatism, but more frequently in a palsy, or epilepsy; the epileptick almost all died, the paralytick recovered.

Nicholas Piso, a physician of *Lorrain*, observes, that palsies generally happen in consequence of this sort of *Colics*, more especially in the northern climates.

Charles Piso, son of the aforesaid *Nicholas*, in the year 1596, visited several monasteries, by command of the cardinal of *Lorrain*, to take care of the health of the religious inhabitants: he found several so violently seized with this *Colic*, attended with such constipation, as to admit of no stools: others again, no ways indeed complaining of pain, but so paralytick, that their arms hung dead as it were, and useless: there were some again, who were epileptic,

lethargic, and oppressed with an unavoidable propensity to the most profound sleep. Seven years after, he attended another convent, where he found many under the same calamitous pains and circumstances, of which not a few died ; others became paralytic. This is frequently observed in *Lorraine* ; nor is this transition uncommon at *Melun*.

Francis Citefius at length, who was a *Poictivian*, and physician to the *French* king, published his book upon this *New and Epidemic Bilious Colic Pain* ; wherein he learnedly treats of its origin, symptoms, course, and cure, and gave it the name, till then unknown, which it now bears, the COLICA PICTONUM.

One *Beauval*, an apothecary of *Rochelle*, wrote a treatise upon this subject in *French*, chiefly taken from *Citefius*.

C H A P. V.

*The COLICA PICTONUM seldom
described after Citefius.*

PHYSICIANS, who are thoroughly acquainted with the frequency, obstinacy, and violence of this distemper, and how difficult it is of cure, cannot but be surpris'd that such an universal silence should have prevailed with regard to this subject: we meet with very little, if any, satisfactory accounts in the writings of those who have frequent opportunities of seeing this disease—In this observation we are confirmed by *Sydenham*.

So that of all the physicians, since the time of *Citefius*, if you except seven or eight, who have given us some hints upon that head, there are but three or four

living, who have expressly treated of it: *Boerhaave* indeed used to mention it in his lectures; but he never professedly wrote upon the subject.

Riverius, next to *Citesius*, says, the bile discharged through the vessels of the intestines into their coats, and by them imbibed, occasions these very excruciating pains, and constitutes this COLIC, *so little known to the ancients*. It is brought thither from the cyst of the gall or mesentery, in the tedious crisis of fevers, or in violent strong passions, or some other external cause, when, upon account of the obstruction, it cannot be conveyed through the common passages, but, by a præter natural motion, it is driven towards the abdominal membranes. Hence arises most tormenting pain, imitating the *Colic*, which continues for many months, in spite of clysters, fomentations, or any other methods. The body falls away, and consumes

sumes with a slow fever; the pains at length remitting, a palsy follows, this humour gradually passing from the abdominal membranes to the spine of the back. This palsy chiefly affects the upper parts; the legs become very painful and uneasy; the bile at length affecting the brain, the patient falls into epileptic fits.

Wepfer gives the case of a miserable wretch, who was in prison twelve years, and laboured under a most severe fit of the *Colic*, and palsy of his arms, inso-much that his fingers became perfectly crooked. Whenever he was costive, he was certain of an immediate return of the pain: he was cured of his palsy without recourse to much medicine; but he ever after, nevertheless, complained of a tense and acute pain of the præcordia. He farther observes, that he had seen, during the course of his attendance in many convents, many, who, from the

violence of this complaint, had their navels almost drawn round to their backs — And in *Alsace*, near the lake of *Zell*, in the dutchy of *Wirtemberg*, he had frequent opportunities of seeing patients affected by these *bilious Colics* falling at length into palsies.

Our famous countryman Dr. *Willis* remarks, that people, who are frequently and violently attacked with *Colic* pains, become at length paralytick: it often happens that we account this consequential symptom among the prognostics of this disease; for patients, who labour under these most excruciating pains, and violent fits of this *Colic*, attended with frequent returns, complain of erratic or wandering pains in their body and limbs, then of a numbness, and at last become totally relaxed. We have sometimes observed epidemic fevers, the pathognomonic symptom of which has been a *Colic* pain, after which the loins, and
limbs,

limbs, and all the muscles of the whole body, have been greatly injured, and a total palsy has ensued.

A person attacked with the COLICA PICTONUM, says *Musgrave*, became paralytick, which was attended with a wasting of his limbs: he recovered at first, and the pains appeared to be gouty—but these pains, which were unfettled, at length became fixed, and were attended with a red swelling of the joints, and proved a real gout; and what is very remarkable, this matter being carried off, the limbs, which for ten years together were feeble and withered, though not entirely dead and useless, became plump, and gave hopes of a sound recovery.

Scheuchzer gives us an account of a spasmodic Colic, which seized a whole monastery; a disease very rare, and difficult of cure. The pain was truly *colical*, obstinate, and attacked the Colon and thin bowels: though it seemed to
remit,

remit, it returned again, attended with frequent inclinations to vomit, loss of appetite, constipation of the bowels, with much flatus, heat of the præcordia, burning pains of the limbs, first of the upper, next of the lower, palsy of the arms, an asthmatic respiration, and an oppressive load on the breast.

Hoffman observes, that *Colic* pains are more severely felt in the thin guts than in the thick, and hence accounts why they are more sharp about and near the navel: *Hippocrates* called them *Iliac*, but says not a word of *Colics*:——now they are called *Colics*, which are attended with horrors, trembling, cold sweat, loss of strength, inquietude, restlessness, anxiety, hiccup, vomiting, constipation, tenesmus, suppression of the urine, spasm of the urinary bladder, fever, a contracted pulse, difficulty of breathing, sometimes with a delirium and epileptic convulsions, and finally a palsy. In
this

this *Colic*, the belly is much compressed, and the navel drawn inward—the body is so extremely coſtive as ſcarce to admit a paſſage for the flatus, or a clyſter; and all this at the ſame time aggravated by a heavy pain in the loins; and the peritonæum and abdominal muſcles are all violently contracted.

May we not rank the *Colic*, ſo well known to the *Japanese*, and deſcribed by *Kæmpfer*, in this claſs? This *Colic* is ſo general there, that ſcarce one in ten of the grown people has ever been exempt from its effects; it ſeldom ſpares one ſtranger, eſpecially if he drinks the beer called, amongſt them, *Sakki*. The name they give this diſorder is *Senki*, which tearing the bowels with pain, occasions convulſions. It is the nature of this *Colic* to vellicate the abdominal muſcles and membranes; and the *Japanese* themſelves are of opinion that the cauſe of this diſtemper is not ſeated in the cavity

cavity of the intestines, but in the very membranous substance of the abdominal muscles, peritonæum, cawl, mesentery, and intestines.

Similar to this *Colic*, is that described by the famous *Linnaeus*, among the *Laplanders*. It attacks, says he, the bowels about the navel, and is attended with the most severe spasms, even to the very pubes, and are by much more painful than the most excruciating torment of a woman in hard labour, insomuch that the poor wretches tumble and toss themselves upon the ground in the most exquisite agonies.

Nor must we omit what our celebrated countryman, the very ingenious and learned Dr. *Huxham*, has observed upon this subject. This *Colic*, says he, raged in *Devonshire*, attended with an uneasy sensation in the stomach, violent pain of the epigastrium, an unequal weak pulse, cold sweat, furred tongue, and fetid breath:

next

next came on a green and atrabilious vomiting, together with a copious discharge of an acid and tough phlegm. In a day or two after, the belly became costive, yielding to neither purges or any other methods; the vomit ceasing, the pain grew intolerable about the navel, loins, and spine of the back, something resembling the *Nephritis*, attended with suppression of urine, and a sense of great weight in the peritonæum. They urined plentifully, the abdomen was frequently hard, sometimes spasmodically contracted. The patient often complained of a violent, fixed, and burning pain in the right hypochondrium, a strong pulse was often observable in the epigastrium, the fæces were very hard, globular, and small, and the tenesmus very troublesome. These pains remitting for a short time, returned again, by attacking the whole spine, shoulders, and more especially the scapulæ; then

then affecting the arms, the hands became entirely motionless: the thighs and legs were equally painful, and as the disorder shifted from the bowels to the limbs, there was a slow fever, sometimes with a delirium; and if, through the whole course of the disease, the urine was pale, and deposited no sediment, a convulsion followed, and a palsy by way of woful relief! *Colic* pains did not always precede, but a pain of the limbs, and then ensued the palsy. *Huxham's* account was published in 1739.

Six years after *De Haen* published his book on the *Colica Pictonum*.

Thirteen years after that again *Grafhuyz* printed a Medical Dissertation upon the same subject; the dispute between these two last mentioned writers, however, was not carried on with equal vigour.

C H A P. VI.

*A description of the COLICA
P I C T O N U M.*

ALL Colic pains before the time of *Citesius*, which were succeeded by palsies or epilepsies, were called *Bastard Colics*, now COLICA PICTONUM, though without effectually investigating its cause. Physicians of eminence have ever since called it so, though the palsy and epilepsy have not come on, and whether they were curable by nature or by art.

Some hours at least before the fit, nay frequently days, the patient complains of a heavy troublesome feeling, either in the epigastric or umbilical region; sometimes, tho' rarely, in the hypogastric; neither are the hypochondres, and especially the right, freed from it: the
6
loins

loins are also affected, and the bowels too are not at all exempted from their share of pain. The mind, as it were conscious of the approaching disease, is overwhelmed with melancholy; and respiration becomes uneasy, broken with repeated sighing. The eyes grow dim, the face pale and wan: the pains in the beginning are seemingly light, and intermit, and are not easily distinguishable, as they seem the effects rather of an uneasy sensation—the appetite decreases, but the thirst becomes troublesome. After too large a meal, the patient perceives a disagreeable fullness, attended with some degree of pain. The belly gradually grows bound and costive, the urine less in quantity, a loathing comes on, the nausea increases, and the pain is now continual. Belchings succeeding the nausea, we are to expect vomitings, which seemingly give ease for a moment; but the pain returns with double violence, shakes the whole

whole human frame, nor will it admit the poor patient the comfort of a moment's sleep or repose.

About this time the *Abdomen*, especially the *Navel*, adhering as it were to the *Vertebræ*, is drawn inward. A fever ensues, with a contracted pulse, restlessness of the body, great anxiety, hiccup, tenesmus, suppression of urine, a spasm of the urinary bladder and anus, which is also so contracted and drawn back, as scarce to give a passage to the flatus, or easily to admit the application of a clyster. The body becomes emaciated, and perceivably falls away; the voice is weak, rough, and sharp; sometimes it is entirely lost.

Besides these *Colic* pains, the joints also are attacked with burning pains, first in the upper, then in the lower parts; the *Colic* at that time is milder and more tolerable. The patient, deceived by this favourable appearance, and flatter-

ing himself with a speedy recovery, all at once finds his limbs forsake him, and, in a very short time after, becomes paralytick. Nor is this the only wretched consequence of this deplorable distemper—for very often a difficulty of breathing coming on, with a tingling of the ears, a dimness of sight, and small nuberculæ and sparks of fire floating before the eyes, portend an epilepsy, with total loss of every external and internal sense. The whole animal machine becomes convulsed : the convulsion does not continue so long even in the true epilepsy. I have seen them hold in a most surprising manner, for eighteen hours together, after a fit of the *Colic*, in a gentleman, who yet, notwithstanding, recovered. I once attended a magistrate, in whom these convulsive motions lasted above forty hours, but he died : this gentleman, eight days before his death, became *hydrophobous*.

C H A P. VII.

*The immediate Cause of the COLICA
PICTONUM.*

WE know from medical observation, that the remote causes of this *Colic* are manifold, as will appear hereafter, when we come to treat of them: as to the immediate cause, it is universally allowed, that all the contents of the abdomen, as well as the containing parts of the human body, are every where richly furnished with nerves, and are consequently most sensible of pain. These nerves, as we shall make it appear in the proper place, in their different productions, expansions, divisions, subdivisions, &c. communicate with all the other nerves of the human body, and are called sympathetic: they have a mutual and uninterrupted dependence one upon the other, from the smallest branch

to the largest ramification. The nerves therefore being universally diffeminated over all the viscera, penetrate them on all sides ; nor is there any the least point in which they are deficient, especially in those parts of the body where they take their origination. This amazing provision of nerves in the intestines and mesentery furnishing the inward membranes of them with an infinite number of *villi*, *papillæ*, and *sphincterulæ*, give it also wonderful *plexuses*, which are the chief instruments of sensation, consent, and motion.

These nerves in the viscera, especially in the intestines and mesentery, every where to be met with, render those parts which they irradiate exquisitely sensible of pain ; and here it is we are to look for the proximate cause of this *Colic* : for the nerves being irritated and drawn up, beget a physical *diathesis*, whereby the mind is made sensible of
pain.

pain. This *diathesis*, continuing long enough, will necessarily affect the nerves, which are in concert with these already irritated ; and this obstinate irritation influences the rest, and brings on spasms, convulsions, epilepsies, palsies, coma, lethargy, apoplexy, and death.

The active organic parts being rendered passive by the action and continual convulsion of the nerves, renders them unfit for secretion or excretion ; the vessels, straitened by the nervous cords, neither receive or discharge any thing ; so that the same cause which prevents exhalation, obstructs inhalation : the dried and juiceless parts, therefore, become shriveled up, having no moisture to nourish, or mucus to lubricate them. As the vessels are, so are the glands ; neither can secrete a mild and benign humour, which they never received. Thence the body becomes dry, and, at length, broken down with pain, and, for

want of due nourishment, languishes, decays, and leaves nothing but the skin hanging on the bones.

C H A P. VIII.

The remote Causes of the COLICA PICTONUM.

THE proximate cause of this painful disease produces the many other remote ones, which, upon a close attention to the disorder, may be reduced to the following:

First. To the remains of fevers carried off by an imperfect crisis, or not well cured.

Secondly. To poisons.

Thirdly. To the too free a use of wine, or of acid-austere fermented liquors, or of unripe acid fruits.

Fourthly. To the gout or rheumatism.

Fifthly. To an obstructed perspiration.

Sixthly. To the scurvy.

Se-

Seventhly. To melancholy.

Eighthly, and Lastly. To the passions of the mind.

C H A P. IX.

The first remote Cause; the Remains of Fevers carried off by an imperfect Crisis, or not well cured.

THIS cause, so perfectly known to *Fernelius* and others; very frequently occurs now-a-days. He says, *Exquisite Colic* pains succeed fevers of long standing, and other bilious diseases, and are not easily cured; for nature, attempting a crisis, and to evacuate the morbid matter by stools, not finding a ready and quiet passage that way, turns it from the veins and viscera upon the membranes; whence, pains arise much more terrible than the disease itself. He further observes, that continual and ter-

tian fevers, nay, frequently quartans, terminated in these pains, and grew more violent at certain periods, which came on in regular succession.

Ballonius was thoroughly acquainted with this distemper. He remarks, that he had frequently seen it after long, tedious, continual fevers, where a sharp and æruginous humour, long lodged in the viscera, had opened itself a passage into the abdomen or peritonæum. This, he farther observes, he especially remarked in those who, tired out by the continuance of their fevers, and anxious to get rid of them as soon as possible, used to apply to old women, quacks, and empiricks, who, checking and obstructing the humours, brought on pains more terrible than the former.

Spigelius very judiciously informs us, that after semitertian fevers especially, these pains happen frequently; for nature throwing the bilious matter upon the
in-

intestines, endeavours at a crisis; which not being able to bring about, she sets the noxious humours afloat, which she cannot expel, not because she is unable to loosen them, but because the parts are too constringed and obstructed to admit a free passage to the putrid bile. A diarrhæa coming on, carries off the pain, which, if checked, will greatly aggravate it.

Charles Pifo observed the same thing after tertian and continual fevers. A young man, says he, had a tertian fever, which became continual; pains of the belly succeeded, which lasted forty days; he foretold a palsy of the arms eight before it happened. In 1617, he observed the same thing in many persons who had been attacked with quartan fevers.

Towards the close of the summer, says *Citesius*, bilious intermittent fevers, which were not thoroughly removed, or had an imperfect crisis, degenerated into *Colics*.

Ri-

Riverius remarks, that the bile discharged by the vessels of the intestines upon their coats, and absorbed by them, occasion most terrible pains, it being translated thither from the gall bladder or mesentery during the tedious crisis of fevers.

Willis is clear in his opinion that *Colics* will frequently happen in long intermitting and continual fevers which have not been perfectly judged; nay, that the *colic* pain is a pathognomonic symptom very common in epidemic fevers.

A bilious fever became so universal and so fatal at *Amsterdam*, in the year 1727, as filled many persons with the apprehensions of a plague: abroad indeed it was suspected to be so. Kept under by the bark, the putrid bile being predominant, so infected the mesentery and coats of the intestines, that the COLICA PICTONUM became a pathognomonic symptom of the foregoing fever.

The

The remains of the disease making some ravage for years after, afforded the physicians a perfect insight into its nature, though they were not so well acquainted with the curative part. The poor wretches were seen wandering up and down the streets, like so many ghosts, weak, pale, and ghastly, with their hands distorted and pendulous, their voice languid and shrill: some indeed were entirely deprived of speech.

Some years after new fevers arose, especially about the autumn, epidemic, though of a milder nature. These were attended with the like *colic* pains, and attacked all persons indiscriminately, without regard to age, sex, or any other consideration. I saw a worthy magistrate, who, in consequence of a tertian fever and this *Colic*, crawled on the ground with agony——Another gentleman from the like cause became a cripple in his hands and feet: his father,
twenty-

twenty-five years before shattered and broken down in like manner by a bilious continual fever, was racked with these *colic* pains, and became totally relaxed. I had an opportunity to make the like observation on a nobleman who was *Dutch* ambassador in *France*, and lost the use of his limbs after a semitertian fever.

I attended a very worthy merchant, who having had a quartan ague too suddenly check'd by the bark, fell into a palsy, being previously almost destroyed by a violent pain of his belly and limbs : what is very remarkable, this same fever, like a spark of fire lurking under the ashes, broke out a-fresh three or four months after, and gave the first flattering hopes of his recovery.

Bauer observes the same, after a similar fever, which was attended with most violent spasmodic pains, arising from the self-same cause. These persons I just mentioned being all well, have

no-

nothing more to remember than their past pains : I wish I could say the same of two promising young noblemen, who are still greatly regretted by their illustrious parents. A bilious fever first, which was succeeded by a semitertian, baffled the skill of their physicians. When I was consulted, I found that the most severe *colic* pains reached from the mesentery to the very *os sacrum* ; they both died lethargic, after the most shocking epileptic fits.

Mr. *Gordon*, an ingenious surgeon, belonging to the military hospital in the *West-Indies*, of a thin, bilious habit of body, about thirty years of age, was frequently attacked, during his residence at *Martinique*, with *intermittent fevers*, which were as frequently *seemingly* removed by the use of the *Bark* ; violent *colics* generally ensued.——These relaxed him to such a degree, that he was constrained to quit the hospital to seek relief

lief at home himself. He came to *Bath*, where he was seized with the COLICA PICTONUM, a disease I had frequent opportunities of seeing abroad as well as here ; but never attended with such excruciating and alarming symptoms as in this gentleman. His belly, which was drawn inward with immense pain, was many days most obstinately costive ; a nausea, and enormous æruginous vomitings succeeded, with a short, thick, fetid breath, anxiety, oppression at the præcordia, *subsultus tendinum*, hoarse voice, *entire loss of sight*, great weakness of the loins, with an unspeakable torment about the *vertebræ*, which nothing could so well relieve as violent compression, or when a person or two lying upon his back, forcibly held it down. He complained heavily of an oscillatory motion in the large *psoas* muscle, and a tingling, uneasy sensation thro' the whole substance of the *medulla spinalis*, which extended even to the very
nerves

nerves of the arms and legs ; convulsions followed, with a total relaxation of his limbs. In short, to all appearance, nothing was now to be expected, and even desired by the poor patient, but an happy release from all his misery in death. He was treated in the following manner, by Dr. Canvane and me, which fortunately succeeded ; and he is at this time in Scotland upon a visit to his relations, being advised thereto for the benefit of exercise and change of air.

℞. Elect. e casiâ cum Mann. ℥ij. Tartar Solub. ℥iij. Syr. ros. solut. q. s. sumat n. m. molem mane & nocte.

℞. Sal. Absinth. ℥j. Succ. limon. ℥ss. Aq. Menth. piper. simp. ℥iss. Nuc. Moschat. Syr. e cort. aurant. ℥j. Spirit. vol. aromat. gutt. xxx. f. haustus. Ingrid. Semicup. post egressum injiciatur sequens enema.

℞. Decoct. Commun. pro Clyst. ℥viij. Ol. lini Olivar. an. ℥iss. flor. Chamæmel. ℥vi.

℥vi. Vin. Antimon. turbid. ℥i. Aff. Fœtid.
v. o. ℥iij. repetatur enema pro re nata.

Utrique femori & brachio applicentur
vesicatoria acria—& Sinapismi plantis pe-
dum, omni 5tâ horâ renovandi.

℞. Spirit. c. c. ℥i. Camph. ℥ss. in S. V.
S. Unguent. Nervin. ℥iij. Pisselæi Indici
℥i. balsam. Peruv. ℥iij. f. linimentum
quocum illinetur dorsum, & Spina hu-
jusce.

℞. Aq. Menth. piperitid. Simp. ℥vi.
Spirituos. ℥j. tinctur. senæ ℥j. castor. ℥ij.
valer. vol. ℥i. Syr. croci. ℥js. Cochl.ij. sub-
inde, &c. &c. &c. *

* The *Oleum Ricini*, though very little known in
practice with us, has been long in great repute, and
frequently administered by the medical gentlemen
in the *West Indies*, who find it very efficacious in bi-
lious complaints, and in the COLICA PICTONUM
more particularly: they either give it inwardly, when
the stomach can bear it, or throw it up in clysters:
It promises to do much in these cases, as a *vegetable pur-
gative oil*, operating gently, and *without irritation*;
a circumstance of great consequence in these disor-
ders. Doctor *Canvane*, who for many years resided
and practised in the *West Indies*, assures me, he found
it an admirable medicine——: he tells me he pro-
poses to publish a treatise upon the use of this oil,
very shortly.

C H A P. X.

The second remote Cause---Poisons.

FERNELIUS relates a case of a gouty person, who had for fifteen days together taken a pound and a half of powdered lead instead of sugar in his broth, by the advice of a quack; on the twelfth day, a terrible dysentery ensued, attended with a fever, and not only very griping pains of the stomach, but of the bowels. His stomach was so immensely weak, and his mouth so exquisitely sore, as scarce to admit of the slightest touch; and so copious was the discharge of wind upwards, that one would have imagined the whole body contained nothing else. The dysentery was cured, but the violent pains of the stomach, belly, and loins, continued twenty days, with a most troublesome sense of inward heat.

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He had scarce a minute's sleep during the whole time ; he was costive, unless when purges and clysters were exhibited ; the fæces discharged both upwards and downwards were all of a lead colour : the whole body was tinged with yellow. All these evils proceeded not so much in consequence of the weight, as of the hidden malignity of the lead. A quartan fever not yielding to the bark, the *saccharum saturni* was administered for a few days : this *Etmuller* confesses carried off and removed the fever ; but it brought on a *convulsive Colic*.

Scheuchzer gives us an history of a *spasmodic Colic* which seized almost all the religious persons in a convent which he attended. The excruciating pains of their limbs ended in palsies : upon a strict enquiry into the cause of this violent disorder, their wine being perfectly good, and their water pure, it was found that their kitchen utensils, both for dressing, as well as keeping their provisions, were

copper, and not tinned within-side.—
Every body must surely know how dangerous the vitriolic particles of copper are, when constantly mixing with our food ! *Heffman* describes the terrible *Colics* which are brought on by the fumes of lead, drawn in at the mouth, and swallowed down with the saliva ; especially in those who work in the lead mines, where they calcine and separate the lead from the silver in hot burning furnaces, as they do in the *Black Forest* in *Germany*, where this *Colic* is very common. The pain is intolerable, their body extremely costive, the navel drawn inward ; all this is attended with great uneasiness and anxiety, contraction of the limbs, nausea, and vomiting ; a true palsy or a convulsive asthma ensues, and torments these poor unfortunate wretches for a considerable length of time.

Potters are also subject to this sort of disorders ; the glaze they use for earthen vessels is a composition of lead. Practical observations evince what almost unconquerable constipations, attended with the most excruciating pains, happen in consequence of medicines prepared from lead, given by empirics in the cure of venereal distempers.

A person, aged thirty, in calcining lead, sucked in the sweet vapours of it. In a day after, he was seized with an intolerable pain about the navel, attended with a most obstinate costiveness, succeeded by a nausea, vomiting, sharp heart-burn, and cold sweats ; in a little time after his left hand became motionless.

A young man, with a gonorrhœa upon him, made too free with the *Tinctura Saturnina*, in consequence of which he was seized with a most stubborn constipation,

constipation, which was followed by a palsy of both his hands.

I attended a young man in a gonorrhœa, who out of modesty applied to a quack for relief, who gave him two powders a day, with the *Saccharum Saturni*, for one and twenty days successively. He became extremely costive, and fell into such terrible *Colics*, as to be frequently convulsed; he lost the use of his limbs by a palsy.—These two persons confessed this to me.

I visited a lady, about twelve years ago, who had taken the *Saccharum Saturni* for a considerable time, but in small doses, in order to remove a slight spitting of blood; she became pale, bloated, weak, tremulous, and at length was attacked with a palsy.

Those who dig in the mines daily experience the pestilential mischiefs which arise from the metallic veins; they generally become asthmatic, phthysical,

cachectic, tremulous in their limbs, fall into *Colics*, and Palsies; and though their lungs are greatly affected, in consequence of the admission of these mineral effluvia, the brain and nerves are so greatly injured as to occasion tremor, stupors, and palsies of the worst sort. No wonder that malefactors are condemned to the mines. They are, however, much worse when they are dry; for the powder being much agitated in the digging, falls upon the aspera arteria, and causes terrible asthmas; swallowed down with the saliva, *Colics*; and frequently a fatal palsy. We are not to be surprised, when we see women in these mines, who have had *seven husbands*, the poisonous steams suffocating and suddenly destroying them. — *Agricola*, a celebrated *Polish* physician, who flourished about the year 1540, declares he had seen many such widows in the mines of the *Arpathian* mountains. Even animals, infected with
this

this poison, frequently swell, next become motionless, and then die senseless.

——We often see these poor wretches, when strongly affected by the poisonous steams in the mines, as they ascend the ladders, lose their hold, and tumble down again ; their hands and feet being unable to support them, through weakness and relaxation.—

So potters, who use burnt and calcined lead in the glazing of vessels, while they grind the lead with which, when melted, they rub them over, before they are put into the furnace, receiving the steam of this virulent mineral, dissolved in water, into their nostrils, mouth, and whole body, are mostly subject to violent tremors in their hands, and at length are struck with palsies.

Nor are we to wonder that lead should be so fatal to the body, even though it be not swallowed down, when our countryman, the great Mr. Boyle, observed,

that quicksilver will, almost instantaneously, be fixed and consolidated by the vapours of fused lead. What therefore are we not to expect from it, when inhaled in a stony substance? It will most undoubtedly fix and harden the blood and spirits.

The fate of painters is not less deplorable: they are chiefly valetudinarians, and short-lived. *Correchio*, almost deprived of every external, as well as internal sense, might barely be said to exist. The divine *Raphael* was snatched away in the flower of his age. These mischiefs plainly arise from the colours they are obliged to use; such as minium, cinnabar, ceruss, varnish, and many others, taken from mineral fossils. Cinnabar is composed of mercury, ceruss of lead, verdigrease of copper, ultramarine of silver: thus almost all colours are borrowed from the mineral kingdom, for metalline colours are by far preferable

able to those taken from vegetables, for many obvious reasons ; we are not therefore to be surpris'd, that painters should be subject to the same complaints as metallurgists. They are all (generally speaking) pale, ghastly, ill-complexioned ; frequently tormented with the same miserable pains, alike afflicted with convulsive spasms and paralytic strokes.

A painter of *Anjou*, aged thirty, of a strong constitution, perceived his fingers more than usually stiff and torpid, then to contract and be convulsed, till at length they became entirely crooked, and almost motionless : the disorder seized his arms and wrists ; and being rendered incapable of walking, his feet were equally attacked, though not painfully ; the pain in his stomach and bowels, notwithstanding every medicinal assistance was given him, was continual, day and night, which nothing relieved except pressure. The physicians were of opinion, that the disease

ease arose from the cinnabar which he used in painting ; the poor man, after lingering for three years, died tabid and consumptive. On opening his body, nothing was found which could give the least light into the cause of the distemper, and of so many complaints.—Yet as he not only wiped his pencil with his fingers, but carelessly sucked it with his mouth, there is no doubt but that the membranes were inwardly injured by the malignancy and unaccountable effect of the poison, though it evaded the nicest inspection of the examiners, and was the hidden source which gave being to so many direful complaints. I have frequently seen many such miserable patients, but chiefly when they prepared the colours themselves ; for these being rubbed into very fine and impalpable powders, fly about, and get into the lungs and stomach, which they affect by their deleterious quality.

I shall

I shall never forget a melancholy case, among the many I have had frequent occasion to see, which happened about six years ago. A very stout, healthy, young man, though he was aware of the danger, incautiously went into a mill where they were grinding cerufs; he scarce tarried there an hour; the air was hot and dry: on his return home he began to complain of a tight uneasiness at his breast; the day following he was very sick at stomach, felt a troublesome sensation about the præcordia; his belly, at first hard, attended with gradually encreasing pains, became totally constipated.—He vomited without intermission; in a few days, however, the vomiting and colic pains left him, but a palsy immediately ensued.

Mercurialis, an *Italian* physician of great eminence in 1596, relates the case of a nobleman, who was seized with a remarkable weakness in both his arms
and

and legs; he had six years before taken antimony.

In the year 1739, I observed the same thing in a surgeon, who, upon taking some few grains of crude antimony, for several weeks together, by the advice of a brother-surgeon in the *India* Company's service, though not without some suspicion of poison, became paralytic in his arms and legs. Colic pains preceded the palsy; even after his recovery he felt slight touches of them.

The like bad effects happen from drinking water impregnated with lead. Houses covered with lead, where rain water is only drank, which has been collected in leaden cisterns, or what is worse by much, preserved in leaden vessels, will frequently bring on this distemper. For this reason it is, why at *Amsterdam*, where this disease was scarcely known, it should now rage to such a degree.—For the houses, which were formerly tiled slantingly,

ingly, are now leaded and flat-roofed. The leaves falling off in immense quantities from the trees in the autumn, are by the winds blown up to the tops of the houses, where soaking in the stagnant water, they communicate a tartness almost sufficient to dissolve the lead, so as to become a cerufs.—The rain next carries it off into the cistern; thus is the water gradually impregnated and infected. Nor are we to wonder, if we do not see these *Colics* more frequently in places where they abound less in trees or in lead. During the fall of the leaves in a calm and serene air, if you carefully cover your lead with wood, the water will be much wholesomer.

These observations are founded in truth: This *Colic* has been often known to seize upon whole families. Eleven people fell down with it in one house in *Amsterdam*; their horrid pains were attended with convulsions, and a relaxation of the limbs—
they

they were moved thence, and drank of other water, and all recovered.

Wines adulterated with sugar of lead, or litharge, such as Rhenish and Mozelle, will produce the same effects; these give those wines a brighter colour, and a finer flavour, but then they are by so much the more dangerous.

So far back as the year 1437, when the Rhenish grapes did not ripen properly, and the wines were consequently acido-austere, the roguish vintner, upon this occasion, used his diabolical art, and by that means brought on this *Colic*. *Brunner*, *Gockell*, and *Camerarius*, three physicians of great learning and eminence in their times, observed the bad effects of this adulteration in the duchy of *Wirtemberg*, *Ulm*, and other places adjacent to the *Danube*, in the year 1596.—The most Serene Duke, in the month of April of that very year, issued out an edict, by which it was made death

death for any person to use any destructive methods in the melioration of these wines. Whole monasteries were swept away by its deleterious effects ; the survivors had but the semblance of men ; they were pale, languid, and feeble, totally relaxed in all their limbs, and might justly be said barely to exist.

Zeller takes notice of the same frauds committed in *Sweden*, which were attended with the like disorders ; such as convulsive colics, cough, asthma, stercoreous breath, constipation, palsy, gout, convulsions, and death.

This infernal custom, first introduced in Germany, travelled into Holland, and thence was conveyed to other different parts, as we know by woful experience. In the year 1749, its baneful effects were felt even at the very gates of the royal palace in *France* : many officers of distinction died of convulsive Colics.

May we not suspect this endemic COLICA PICTONUM, in *Surinam*, to arise from the same cause? It spares the blacks, but makes havock among the whites. A forty years retrospection will confirm us in our suspicion; the *Europeans* only drink *French* wines, and this indeed they do pretty freely; now *Bordeaux* wines easily grow sour under the equinoctial line, but are recoverable by the iniquitous method just related. This is so true, that we find those who drink *Madeira* wines, are not troubled with this *Colic*; nor is it by any means endemic amongst them; neither do they lose the use of their limbs.

Wepfer attended many monks afflicted with these *Colics*, who perfectly recovered by changing their noxious, adulterated, for good and sound wines.

C H A P. XI.

The third remote Cause; the too free Use of Wine, or of acid-austere, fermented Liquors, or of unripe acid Fruits.

SPIGELIUS saw a semi-tertian changed into a Colic, which held twenty-four years, coming on every month periodically, and this was brought on by drinking of sour wine.

The same thing *Charles Piso* observed, during his attendance upon several convents, where they drank pretty freely: they were almost all of them seized with most excruciating colics, attended with constipation of the belly; frequent vomiting, belching, slow obstinate fevers, relaxation of the limbs, epilepsies, lethargies, and most profound coma—they

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suspected

suspected themselves to be poisoned ; but they soon changed their opinion, upon seeing their young brethren, strong and hail, who lived soberly and abstemiously ; they pursued the same methods, and all very happily recovered, and did well again. *Sennertus* observes that *colics* very usually end in palsies, gout, and epilepsy in *Moravia*, *Austria*, *Franconia*, and other places where they drink very strong and tartareous wines. It is not, says he, that these wines occasion the *colic*, because they bring on a costiveness, but because they constrict the bowels, their motion becomes inverted, and the patient vomits up every thing. Do these wines in this case act as vitriol or alum ? if so, the retained humors, which should exhale, regurgitate upon the veins, or rush towards the head, and excite convulsions, or discharge themselves upon the extremities, and produce a palsy. Such a colic was epidemic in *Silesia* in
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the spring of the year 1621; the epileptic almost every one of them died, the paralytic all recovered.

Citefius was of opinion that the mendicant friars were more particularly subject to this *colic*, because they were obliged to drink acido-austere wines, not being in circumstances to procure themselves better. In 1594, thirteen reverend fathers, and there were but thirteen in a certain monastery in the province of *Poitou*, all complained together in the space of one month only, of their hard fate, the malignancy of the air, and their sour and very sharp white wine, which brought on severe colics.—They had been used to better and more generous wines.—They changed their air and wine, and all quickly recovered.

Crato, in 1582, observed the same *colic* in *Moravia* arising from the self-same cause. *Cardanus* speaks of a *colic*, which not only affected the belly, but the breast,

back, and neck, attended with a violent palpitation of the heart, owing to the drinking of sharp and austere wines.

Wepfer has made the like remark: our more healthy monks, says he, drink a good well bodied red wine.—We seldom meet with convulsive colics: but where they drink a sharp unfermented small white wine, they are sure to have the colic. The fathers of an adjacent convent, who had no other wines but these austere white ones, were all of them attacked with the disease.

Musgrave just lightly mentions the *Devonshire colic*, which *Huxham* has so very elegantly, as well as accurately described. It is, says he, occasioned by the sharp cyder, since it only attacks those who drink very freely of it; in a plentiful cyder year, it makes great havock, but seldom makes its appearance when apples are scarce *.

* See his admirable treatise on the *Devonshire Colic*, printed at the end of his *Observations on the Air and Epidemic Diseases*, &c.

I visited a gentleman in the year 1750, who is now perfectly well—he was wont, in order to keep down the bile (as he called it) to take very large quantities of lemon juice, which very nearly destroyed him; for he became pale, languid, cachectic, and, frequently subject to colical complaints, and after long sufferings, the palsy ensued. Those who have indulged themselves in too liberal a custom of punch drinking, will find their nerves greatly affected by it, and fall into *colics* and palsies.

I shall never forget the case of a young woman, who, through the mistake of her apothecary, took a draught, acidulated with a drachm of spirits of vitriol, instead of lemon juice; her sufferings were inexpressible.

C H A P. XII.

*The fourth remote Cause, Gout
and Rheumtism.*

*C*onstantinus Africanus long ago observed that the colic easily changed into the gout.—John Gaddesden, so long as since the year 1320, has made the same observation. *Duretus* frequently prognosticated the gout during the fit of this colic.—*Andrew Laurentius* expressly says the same thing.

That oracle of physick *Hippocrates* remarks, that those who have the gout, are slightly attacked with the colic,—which encreases as the gouty fit goes off.—This he again repeats in his book, *De Humoribus*: “*The humors deposited upon the intestines relieve the pains of the joints; and vice versa.*” *Fonseca* and *Mercurialis* have
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the same observations. A patient of *Musgrave's* laid up with erratic pains, seemingly rheumatic, upon being attacked with a colic, fell into a palsy: these flying pains became truly arthritic, the joints swelled and inflamed, and what is very remarkable were feeble and motionless for ten years together; yet without any sense of pain, being in other respects extremely healthy. By the advice of a quack, his limbs were rubbed with some ointment, upon which an asthma followed and killed him.

Frequent are the metastases from the gout to the COLICA PICTONUM, and, what is very unaccountable, it will intrude itself upon whole families.—I have seen sisters, brothers, wives and husbands, all together attacked with this disease, and finally become paralytic.

A lady too close in her affectionate attendance upon, and lying in the same bed with her husband whilst under this grie-

vous disease, became also infected with it; the whole family were down with this afflictive colic—how often have I seen them tortured, their limbs relaxed, tumbling about on the floor, yet ever eased by a fit of the gout: three recovered of the family, two of them died epileptic. How careful, therefore, should we be to avoid cohabiting together in that dangerous malady. An obstructed perspiration, the two frequent use of mercury, immoderate venery, hard drinking, repeated purges, the passions of the mind, grief especially, will chiefly bring on these arthritic complaints: for the most subtile fluid, destined to pass the vessels and minuteſt nerves, being injured by them, contract an amazing acrimony, which, if it reach the *brain*, occasions *apoplexies*, *palsies*, *deliria*, *weaknesses*, *lethargy*, *tremors*, and *convulsions*. If it effect the lungs, it causes *asthma*, *cough*, and *suffocation*; if the inward
parts

parts of the thorax, it brings on a *convulsive pleurisy*; in the abdominal viscera, it will produce *nausea, anxiety, vomit, belching, colic, convulsion*, and a thousand other alarming symptoms, concomitants of the COLICA PICTONUM. The rheumatism is a distemper near a-kin to the gout, and arises from an acrimony of the humors, too high living, sudden cold, or obstructed perspiration, and will produce a like number of evils. In case it attacks the loins, a *lumbago* will ensue, if the hip a *sciatica*, if the bowels a *colic*. Nestling itself in the parts, like the gout fixed on the bowels, it will, after a long train of mischievous torment, end in a palsy. We frequently observe people troubled with flying pains fall into ugly colics; the rheumatism and colic have raged alternately: at length a palsy has followed. I visited a gentleman who had been a governor in the service of the East-India company, who, twice

a year, and that nearly about the same time, was seized with rheumatic pains in his legs and feet, which, in a few days becoming easier, fell upon his bowels, and threw him into convulsions from the violence of the colic.

C H A P. XIII.

The fifth remote Cause---An obstructed Perspiration.

THOUGH an obstructed perspiration has generally been accounted amongst the causes of a rheumatism, and this, as we have just observed, frequently brings on the colic, yet has it seldom been reckoned amongst the probable and distinct causes of the COLICA PICTONUM. *Citesius* even himself seems to have neglected this circumstance, tho' in all other respects he appears to have been a very accurate and clear observer,

when

when he says, that this disorder was less frequent, when furred garments were entirely disused.

I have in my practice often experienced the ill effects of this, that I am very positive this *colic* happens more frequently in consequence of this obstruction than is in general imagined.

Not only the external but the internal part of the body also perspires, for they are alike moistened by a thin, volatile dew exhaling from themselves, so that the whole superficies of all the parts, either external or internal sieve-like transude every instant. Now the exhaling insensible vapor rising from the outward surface of the body, whether it issues forth from the cutis, or from the cutaneous *papillæ*, is excrementitious: now this falling back again upon the whole mass of blood, will necessarily by its acrimony injure the sound humors, and cause that irritation which produces such
won-

wonderful effects in the animal œconomy.

Sanctorius, in his statical aphorisms, has put this matter beyond all doubt.

Some years since, I attended a very worthy gentleman, a director of the India company, of a strong and healthy constitution; but getting up precipitately one morning out of his warm bed, and going abroad with his cloaths carelessly loose about him, in a very nipping cold, he was seized in the right epigastric region with a most severe pain, attended with all the excruciating agonies of the COLICA PICTONUM, which ended in a palsy of his hands and feet.

A lady, from a fond attachment to a beloved husband, constantly lying in bed with him in order to be more ready in her close attendance, in consequence of frequent colds and great fatigues, caught this dreadful colic, and died paralytic—
The *Genus Nervosum* was so tender, as
to

to bring on all these unhappy and fatal symptoms.

Not long since a very dear friend of mine, being in the country during the summer season, and frequently getting out of his bed very early in the morning, in order to take the benefit of the cool air, in a careless loose dress, laid himself down to sleep, contracted a most terrible colic, which gradually became so obstinate and severe, as to throw him into strong epileptic fits, which killed him.

Dr. *Herbert*, a very ingenious physician at *Parameribo*, observes, that an obstructed perspiration is the most frequent cause of the endemic colic at *Surinam*. The inhabitants, being weakened by the sweats which are continually and daily the effects of very hot weather, delight to lay quite naked in their hammocks to enjoy the night air, for which purpose all the doors and windows are thrown wide open—thus are they seized with

78. COLICA PICTONUM ; or,

with violent and most inveterate colics, which are attended with convulsions and palsies: it makes great havock among the *Europeans*; even the stronger negroes often feel its fatal effects.

We are not to wonder that the autumn and winter seasons, which are less adapted to promote insensible perspiration than spring and summer, locking up, as it were, the excrementitious perspirable matter in the body, should be productive of pains in general, but more particularly those of the abdomen—hence it evidently appears, that an obstructed perspiration is one of the causes, and that not an immaterial one, of the COLICA PICTONUM.

C H A P. XIV.

The sixth remote Cause. The Scurvy.

THE *scurvy* most frequently visits the western ocean, and rages chiefly in *England, Holland, Denmark, Norway*, and in the western parts of *Germany*; in the northern climates it for the most part frequents the neighbourhood of the sea, and maritime towns—indolent persons and sailors who are constrained to live upon salt and smoak-dried flesh and fish, and unfermented farinaceous provisions and stinking water, are mostly attacked; neither does it spare the melancholy and hypochondriac, or such as have chronic distempers, or lead sedentary lives; and this too more particularly if they have been too busy with the jesuit's bark.

The proximate cause of this distemper seems on one hand to arise from a viscosity,

dity, and on the other from a sharp, acrid, salt, acid, or alkaline tenuity, exciting among many other phænomena gnawing pains darting through all the joints, bones, articulations, and abdominal viscera, in a most wonderful manner.

That it should shew itself in so many different shapes in the COLICA PICTONUM, of which it is one of the most cruel causes, is not at all to be wondered at, if we look into the writings of those who have treated upon this distemper.

It will be sufficient to produce the authority of *Eugalen*, who wrote the best of any man upon the scurvy. The scurvy, says he, affects the bowels and stomach with an infinity of pains, whence it took its name among the *Dutch*; the legs and arms become languid, nor do the pains remit, till a palsy seizes on the limbs, the matter being as it were translated thither.—He frequently observed palsies, convulsions, and epilepsies after
long

long continued scorbutic colics; which returned periodically.

A captain in the *India* service was frequently seized with the *colic*, and became paralytic in his limbs. After many voyages he was cured of his scurvy, recovered the use of his limbs, and is perfectly well. Navy surgeons in very long voyages have frequent opportunities of seeing patients sinking under this calamitous disease, who recover surprisingly, upon being put on shore to live upon fruits and vegetables. If a muriatic salt be the occasion of this distemper, the limbs will be stiff and rigid; but if it arise from an alkaline or acid diathesis, they become flaccid, pendulous and flexible.

I saw a miserable person quite bloated by the immoderate use of sea-salt; his limbs were totally relaxed, and as stiff and hard as a fish dried in the sun. The sweat spontaneously breaking out was

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exqui-

82 COLICA PICTONUM ; or,
exquisitely salt; which when left remain-
ing would form perfect chrystals about
his nose, easily discernible and friable.—
This I saw and felt.

C H A P. XV.

The seventh remote Cause. Melan- choly.

BY melancholy I mean a long and
obstinate delirium without a fever,
with a fixed and determined attention to
one and the same object. This is oc-
casioned by that disposition of the hu-
mors, which the antients called *atrabilis*.
If it arise from a disturbed mind,
which, however, is rarely the case, the
bile itself becomes black; the basis of
which is an earth intimately united with
the thick oil of the blood, deprived of
its more balsamic and fluid particles. If
by its tenacity it be accumulated in the
hypo-

hypochondriacal vessels, it affects the mesentery and bowels both externally as well as internally; for we often remark, in dissecting human bodies, this transuding bile iniquating the parts near to the liver with a blackish, yellow and green colour, and injuring the large mesenteric nervous plexus by its contact. Here are these *colics* chiefly seated; by their means we account for the surprizing consent they bear with the viscera, since they are every where very plentifully dispersed over almost all the intestines, stomach, gall-bladder, ductus choledochus, and whole content of the abdomen: the black bile therefore, while it ferments in its cavities, must necessarily excite dreadful pains in the adjacent, and in an instant infect the remoter parts, attended with convulsions, and the most excruciating torments.

Platerus makes the same observation: This bile, says he, penetrating and soak-

ing into the very substance of the intestines, burns, vellicates and destroys them; and by its lodgment there, brings on violent pains, which by their constant irritation affect the whole nervous system, and produce convulsions and palsies.

Spigelius and *Riverius* say the same thing in almost the very same words. The bile discharged on the coats of the intestines, and imbibed by them, brings on sharp pains and the *Colic*, so little known to the ancients, when, upon account of obstruction it cannot pass by the common passages, but is suddenly driven by an unnatural motion to the abdominal membranes. Hence arises a most intense pain resembling the *colic*, which, giving way to no medicinal application, is only relieved by a supervening palsy.

Citellus observes, that women of tender constitutions, who are broke down with

with

with grief, become paralytic after violent convulsive colics.

Wepfer illustrates this observation by the following case : A person detained in prison twelve years became dull and melancholy, and was seized with an ischuria, attended with costiveness and colic ; a palsy ensued, which was relieved by a bilious diarrhœa. A gentleman, inconsolable for the loss of an only daughter, fell into a melancholy. Burning carbuncles on his skin certainly denoted a black bile ; after some time he felt very dreadful colic pains, attended with the most obstinate constipation of the belly ; which were succeeded by a palsy of the arms. Taking freely of the spring juices, and drinking Spa-water, happily cured him. The year after, upon some unlucky occasion, he had a return of his melancholy fit, which again brought on his pains and palsy.

I have myself had frequent opportunities of making the same observations.

C H A P. XVI.

The eighth remote Cause. Passions of the Mind.

RIVERIUS observes, that he had often seen palsies supervene *colics*, occasioned by violent passion.

There are but few practitioners in physick, who have not seen the wonderful effects which the passions of the mind have upon the nerves, especially the epigastric and mesaraic: they have an amazing power over all the sphincters of the body; nay, do they not even destroy the proportion the vessels bear, between their trunks and ramifications? Sometimes they promote, at others obstruct, internal and external perspiration, sweat, urine, stools, tears, nay the very semen. Passion

will affect one man's stomach, another's belly, and this by either relaxing or constringing. What happens in the larger parts, will alike happen in the most minute; thus are the mucous villous coats of the gland constringed, the gastric and enteric juice is obstructed, the papillæ become inactive, which, in hypochondriac and hystERIC people, are wonderfully irritable, they draw the yielding nerves into consent, spasms, convulsions; epilepsies ensue, and if the cause continues for a time, the poor wretches become paralytic. In the year 1741 I attended a very worthy friend; he had one of the most tender and delicate constitutions I ever met with; his understanding was quick, but he was of a very hasty disposition, subject upon the least ruffle to great anxiety at the præcordia, to be costive, to have severe colics, which generally ended in a palsy of his hands: being of an amorous complexion, he had frequent

nocturnal pollutions; which are so very destructive to the nerves: for two years did he, as it were, struggle with death, at length, however, worn down by strong epileptic fits, he lay eight days *hydrophobous*: this most shocking symptom I observed in the last scene of his life; his sleep was disturbed and frightful, attended with a twitching of the nerves, an amazing anxiety at the præcordia, and painful, heavy respiration, and dreadful horror at the sight of liquids, which, upon the slightest touch with the lips, threw him into the most unspeakable agonies, tremors, and fury. His tongue was rough and black, his mouth yawned, and he howled and barked like a dog, his voice was hoarse. His mouth was full of a thin froth, which he spit grinning horribly at the by-standers; he lost his eyesight, and his eyes were greatly blood-shot, he nevertheless would wildly feel about him with tremulous hands, in order

der to bite any of the attendants he could lay hold of; at length a cold sweat, the welcome harbinger of death, came on, and put an end to all his miseries.

About three years before this I saw such another case, except the *hydrophobia*, in a very beautiful lady, who being almost worn out with fatigue during a close and affectionate attendance upon her husband during his indisposition, was seized with all these symptoms, upon a sudden fright, on seeing one of her servants wounded and bloody. I also knew a very delicate lady, who, upon the slightest occasion, fell into colic pains, epilepsy, and palsy.

Those who are too much addicted to venery, are frequently exposed to these disorders. And no wonder, since a too free use of amorous dalliances is one cause of the COLICA PICTONUM: it seems, however, a more remote one, inasmuch as it wonderfully increases the motion
and

and irritability of the nerves, and in that particular acts as a prædisposing cause.

C H A P. XVII.

The diagnostic Signs of the COLICA PICTONUM.

WE shall easily and very readily account for the diagnostic symptoms, from either of the foregoing causes.

Before the pain comes on, the patient generally feels a weight and uneasiness either in the umbilical or gastric region; sometimes, though that very rarely, in the hypogastric, about the loins, hypochondria, especially on the right side, and the intestines. He becomes heavy and melancholy, breathes short and hard, and frequently sighs; his eyes are dull, and face pale.—The pains now seem to be something easier, but are continual,

tinual, tho' scarce discernible, from the former weight and uneasiness. His appetite begins to fall off, his thirst encreases; his belly is costive, and he discharges but very small quantities of urine, and all this is attended with a loathing; a nausea succeeds, and encreases with the pain, which is now continual: belchings ensue, and the peristaltic motion of the intestines is inverted.—Next follow frequent inclinations to vomit, giving momentary relief, but the pains soon return, attended with vomiting. The abdomen, especially the umbilical region, is drawn inward. A fever comes on, with a slow creeping pulse, and a tumbling and tossing about the body, great anguish, hiccup, tenesmus, suppression of urine, and spasm of the anus and urinary bladder.

C H A P. XVIII.

*The prognostic Signs of the COLICA
PICTONUM.*

IF these recited symptoms hold for a time, the body wastes away, the voice becomes hoarse and weak, nay frequently is entirely lost. The limbs, both the upper and lower, burn with pain, while those of the belly become easier. The patient, deceived by this interval of ease, and hoping for a better fate, suddenly feels his limbs fail him, and in a little time after he becomes totally relaxed. Nor is this the period of their misery; for very often respiration becoming difficult, convulsions and epilepsies, (the internal as well as external senses being entirely destroyed) will shake the human frame, attending or rather succeeding upon a tingling of the ears,
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a dimness of sight or sparks of fire glaring before the eyes. The atrophy encreases, and a loss of voice, dyspnæa, blindness, phrenitis, and lethargy, foretel approaching death.

C H A P. XIX.

*An anatomical Inspection of the
Body.*

PHYSICIANS are too well acquainted with the uncertainty of anatomical enquiries, so as to judge with precision between a cause and its effect. Sometimes, in investigating the one, we frequently lose sight of the other, and this is more particularly true in diseases of the nerves : for this reason it is, why in persons who have died of the COLICA PICTONUM, we have found little else upon dissection, but the colourless intestines distended with flatus.

Senac,

Senac, that most able anatomist, who has so very accurately written upon the diaphragm and the heart, dissected above fifty persons, who died of ~~the~~ COLICA PICTONUM ; and yet, in his letters to me upon that subject, he honestly confesses that he could find nothing there, which afforded any light to lead us to the cause of the disease.

Fernelius opened the corpse of a painter ; his liver, spleen, stomach, and kidneys were perfectly sound, there was neither obstruction in the gall bladder, nor any quantity of morbid matter lodged in the mesentery, or in any other part whatever, which could give room to account for the cause of his indisposition. But if any of the remote causes which have been mentioned in the foregoing chapters, occasion this *Colic*, we then frequently are thoroughly satisfied upon inspection.

In the year 1592, the body of a Franciscan friar, who died of this complaint, was opened; the membranes of the jejunum were turgid with an æruginous bile, much distended, very near the region of the liver: The coats of the intestine appeared soaked with a thin bile, nor was the epiploon, which was coloured with it, free from the infection; the coats of the intestine distended with wind, and near destroyed by the acrimony of the bile, were almost torn to pieces, the external coat arising from the peritonæum was the only entire part left.

After I had received *Senac's* letters, I opened the bodies of two patients who died of this *Colic*, which was brought upon them by melancholy, in consequence of many troubles.—I found the concave part of the liver, and the parts adjacent, tinged with a blackish green bile.

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The following year I examined the body of a person who died of a scorbutic *Colic*: the naked papillæ appeared every where excoriated from the sharpness of the humours, and defect of the intestinal mucus, which ought to lubricate their inward coats, and the innumerable vessels of the intestines and mesentery were at the same time varicose, and contained a black blood.

C H A P. XX.

A short Explanation of the Symptoms of the COLICA PICTONUM.

THE following seem to be the most remarkable, as well as the most troublesome symptoms attending the COLICA PICTONUM.

I. *A sense of a disagreeable weight and uneasiness* preceding the Colic pain, forebodes an impending spasm, and a beginning contraction of the nerves; the
many

many excretory and secretory organs of the abdomen being constringed, the progressive motion of the humors must necessarily be impeded; and as the resistances encrease, so will the sense of weight; and this will appear more evident, when we consider what a consent there is between the abdominal and diaphragmatic nerves; and this will also sufficiently account for their contraction. The passions of the mind acting upon the epigastric nerves will have the like effect.

2. *A more laborious respiration.* Since the lungs are not idiopathically affected, this symptom depends principally upon the injured action of the diaphragm; it appears from the foregoing paragraph, that its nerves have a wonderful consent with those of the abdomen. This is very obvious in hypochondriacal complaints; for the breast being in no manner affected in this case, still the patient complains of a difficulty of
H breath=

breathing, attended with frequent sighing, in consequence of the affection of the abdominal nerves.

3. *Abdominal pains* are, and in fact ought to be, in a compound ratio with the irritating cause and number of the nerves more or less irritable: hence hypochondriacal and hysterical people feel these pains and their effects in a more violent degree than the strong and hardy; the wonderful provision of nerves in the mesentery and intestines furnishing their inward coats with an infinite number of villi, papillæ, and sphincterulæ, impart also an amazing number of plexus's, which give that sense of exquisite pain to every part they irradiate; no wonder, therefore, that these irritated nerves should cause spasms, convulsions, and epilepsies.

4. *The belly bound, and the urine discharged in small quantities*, is the effect of a gradual increasing spasm. The peristaltic motion of the guts is stopped, and the
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nervous cords of the intestinal tube constricted by this spasm. The organ continues exhaling and inhaling, the glands secrete no lubricating humor, the gastric and enteric juice is deficient, the villous membrane becomes dry, and the hardened fæces adhere to the juiceless, constricted intestinal tube. The bile so necessary to the expulsion of the fæces being wanting as an efficient cause, for all the secretions are obstructed, the resistance will be the greater, and baffle every endeavor. The miseraic nerves being spasmodically constricted, both the venal and hypogastric plexus formed from it, becoming rigid, will prevent the secretion and excretion of the urine. If the costiveness prove obstinate, and the cause of the spasm encreased, the very tendinous ligaments of the *colon*, which extend themselves up to the *rectum*, contracts, and the anus will be drawn back.

5. *Nausea, belching, vomiting*, arise more or less from the same cause; since even a slight convulsion of the fauces, œsophagus, stomach, intestines, and a vain endeavor to puke, will bring on a nausea.

If convulsions of the sphincter of the œsophagus, of the œsophagus itself, the upper and lower orifice of the stomach and bowels, stop the elastic air but for one moment, and emit it again in the next, a belching will be the consequence. If the muscular fibres of the fauces, stomach, bowels, diaphragm, and abdominal muscles, be strongly convulsed, a vomiting will ensue, and the very intestines and other viscera will discharge themselves that way. During this interval the peristaltic motion is not stopped, but inverted ; for the animal body is so constructed, that those things which are injurious to it are washed away by a rich lymph, or are carried off spontaneously by stool or vomit.

5. *A retrotraction of the abdomen* happens in consequence of the contraction of the intestines, and of the whole contents of the abdomen. The mesentery arising from the loins, so rich with plexus's of the intercostal nerves, spasmodically drawn towards the fixed point of its origination, draws back the abdomen itself, the intestines, peritonæum; the very abdominal muscles become contracted, and the abdominal system of veins and serous and lymphatic vessels being emptied by this convulsive contraction, draws the subsiding abdomen towards the spine of the back.

6. *A slow fever*, from the irritation of the nerves, and an almost ever attending pain, occasioned by the acrimony of the humors daily encreasing. The obstructed, lacteal, and absorbent vessels, prevent the ingress of the chyle, nor permit a renovation of humors.—The depauperated blood becomes gradually more and more acrimonious, and in process of time su-

perlatively so; and this it is that produces this symptom.

7. *An atrophy*, in consequence of the continual vomiting, which prevents nutrition. This, if it persevere, is the same thing as if the patient were starved: the want of sleep will also aggravate this symptom. Some animals have been nourished by sleep, even without the intervention of meat or drink; and if we will believe what Martial says, have even grown sleek and fat.

*Tota mihi dormitur hyems, & pinguior illo
Tempore sum, quo me nil nisi somnus alit.*

Book 13. Epigr. 59.

Too much watching, on the contrary, dissipates the spirits, dries the body, thickens the humors, and makes them acrimonious; these stimulate the solids, increase motion, and bring on a fever.

8. *Diminution of voice, hoarseness, and entire loss of it*, because the mucus, which
should

should line the throat, is wanting, and the nerves are relaxed. The voice is formed by the expulsion of the air contained in the lungs, by means which contract the thorax : confined in the *aspera arteria*, bell-like ventricles, and thence in the glottis, it becomes tremulous, sonorous, and clear, by the intervention of the recurrent nerves. The agility of the muscles of the glottis, the very opportune relaxation of the ligaments destined to connect the cartilages of the larynx, the greater and lesser aperture of the glottis, and the lubricating juice of the thyroide gland, make the voice sonorous. If these be all of them injured, it brings on a diminution of the voice ; if they be entirely deficient, they totally destroy it. The destruction of the mucus, and relaxation of the nerves, will very easily account for every phænomenon observable in the COLICA PICTONUM.

9. *Palsy of the limbs*, the effect of a continual spasm of the nerves, arising from their callosity. The nerves issuing from the cranium receive their covering from the dura meninx. A most fine vapor exhales between this and the nerve, whereby a concretion is prevented. Nature very wisely uses the same precaution with the tendons, in order to prevent their adhesion to the coats. If this moisture be wanting, a concretion will happen in both cases, the tendons will become motionless, the organical action of the nerves will be destroyed, and the limbs become stiff, rigid, and useless. The muscles destined for the movement of the shoulders lose their fleshy substance ; then those also which move the arm and ulna ; the carpus and metacarpus and phalanges, will shrink and fall away. The tendons are so fastened by the vaginæ, as to be stiff from the shoulder down to the very tips of the fingers.

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The feet, tibia, and thighs are in the same condition : this produces a more or less perfect palsy. In some, tho' the motion be destroyed, the senses remain entire ; so that the common extensors of the fingers, the *supinatores* and *extensores* of the thumbs, and the *abductores* and *adductores* first lose their motion. If the feet become paralytic, the *extensores* of the legs will be first affected ; so that the poor patient can move his leg, though with some difficulty, either way : yet is he unable to stand. But where the palsy is complete, the upper and lower extremities are entirely deprived of sense and motion ; hang pendulous, and perfectly useless to the body, which shrinks to a mere skeleton.

It were happy could we as easily account for all the surprizing phænomena, as we can recount them. But we are circumscribed by limits which it is not in our power to pass.—The nerves,
through

through the continuance of the disorder, become callous, and the farther they are distant from the brain the sooner they perish. The blood deprived of its spirits preserves those parts most contiguous to the brain, while those at a distance from it chiefly suffer. This is remarkably observable in scorbutic persons who lose the use of their hands and feet upon the slightest touch of a colic. Does the communication of the abdominal nerves of the neck with the brachial, explicitly account for a palsy of the arms? Or will the troublesome passage of the crural nerve in its traverse from the abdomen through the middle psoas muscle determine why the thigh, leg and feet, should be relaxed? Though we are not perfectly clear upon this subject, yet are we not entirely deprived of some light by which we may unravel these phænomena.

10. *Convulsions and epileptic fits.* This may be easily understood when we consider the great distribution of nerves in the abdomen. The large sympathics, or intercostal nerves, in order to join the fifth and sixth pair, seem to ascend towards the anterior parts with the internal carotid. Now the angle of conjunction is so acute as to prevent their being mistaken for the recurrents. What therefore is taken for the original descending branch of the nerve is nothing more than the ascending branch, which ramifying within the cranium would join itself to the abovementioned nerves. The intercostals, called the great sympathics, run near the vertebræ, at the root of the tranverse apophyses, and the internal lateral surface of the os sacrum. They are divided through their whole extent, as so many cords, into various ganglions; they communicate from the back part by small collateral branches with the ganglions

ganglions of the spinal marrow; from the forepart, however, they furnish the ganglions with branches of their own. These ganglions differ in size, color, and consistence, and are as it were so many originations of the largest sympathetic pair. The superior, called cervical, is the biggest, though the softest, in shape resembling an olive, longitudinally placed near the pharynx, at the root of the three upper vertebræ of the neck. From the top of the ganglion rises a nerve which enters the scull with the internal carotid; but the ganglion adheres to the trunk of the eighth pair by means of small fibres or threads.—Either way, however, it communicates by very short branches with the first, second, and third cervical, and even with the branch of the eighth pair, as far as the larynx. In its passage it affords small branches to the pharynx, carotid artery, and at length sends a pretty considerable one to the breast. From
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the lower part of the ganglion arises a small branch descending over the anterior vertebral muscles of the neck, adhering, enclosed, as it were, in one sheath, to the eighth pair and carotid artery, as far as to the last vertebra of the neck. The nerve descending from the back part sensibly becoming larger joins the third, fourth, fifth, and often the sixth cervical pair, the oblique smaller ramifications intermixing with them. Just by the last vertebra of the neck, near the lower cervical ganglion, inflected towards the exterior parts by the subclavian artery, proceeds the so called dorsal, and forms a larger ganglion; both these ganglions communicate with the vertebral nerves by the intervention of small ramifications.

The last cervical ganglion, and sometimes the first dorsal, gives a branch to the large recurrent nerve: hence rises a nervous cord, which accompanies a branch
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of the eighth pair near the axillary and carotid artery, and goes off towards the plexus pulmonaris; thence it passes to the trunk of the intercostal; and eighth pair, to the cardiac plexus, the left recurrent nerve to the heart, and its parts adjacent, &c. Under the first dorsal ganglion a trunk descends over the ligaments which connect the ribs to the vertebræ. Then descending between both ribs, it receives a ganglion, with which, by means of a double and very short thread, it communicates from behind with the costal and next dorsal nerve. Towards the lower parts it generally sends five branches, before it passes the last dorsal vertebra. These ramifications uniting form one large cord, collaterally as it were perforating the diaphragm, first furnishing its convex surface with a few fibrillæ. It also affords some to the concave part, and forms a kind of ganglion just above the kidney, called the plexus semilunaris. The right
and

and left ganglion near the stomach above the cœliac artery communicates with the eighth pair.

There is also a kind of intermediate plexus called cœliac, which furrounds the cœliac artery, and furnishes the mesocolon with small nervous fibrils.

An hepatic plexus arises also on the right side, which joins some small branches of the diaphragmatic nerve, and furnishes the hepatic arteries, vena portarum, gall-bladder, duodenum, pancreas, and suprarenal glands, with nerves. On the left side the semilunar ganglions form the splenic plexus, which, by the intervention of the plexus stomachicus communicating with the eighth pair, embraces the splenic artery, and passes into the pancreas and spleen.

From both the semilunar ganglions issue branches, which, united by the fibrillæ of the lumbar ganglions, form the

renal plexus, furnishing the spermatic vessels with small nerves.

This renal plexus, together with the semilunar, greatly contributes towards the formation of the large meseraic plexus.

These two semilunar ganglions immediately under the diaphragm mutually send out nervous branches, which constitute the *rete plexiforme*.

The large solar plexus, as it is called, here and there disperses nervous fibrillæ about the mesocolon, mesentery, and diaphragm, and forms a kind of covering to the superior meseraic artery, almost to its most ultimate branches, which it every where accompanies quite to the intestines and meseraic glands.

This superior meseraic plexus is chiefly composed of the hepatic and renal gland, and semilunar ganglion, and furnishes the lower meseraic artery with a truly nervous coat, which accompanies
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the artery, and sends its branches to the very intestines, which is a very remarkable circumstance. To this coat and its processes we give the appellation of plexus of the lower mesentery. Below again, from the same origin, rises a third plexus called hypogastric, just above the last dorsal vertebra, terminating in two compressed ganglions, which embrace the hinder part of the rectum; this gives branches to the intestine, urinary bladder, spermatic vessels, and all the parts contained in the pelvis. |

The collateral branch being sent out, the intercostal becomes smaller, and slantingly perforates the lower muscle of the diaphragm, but, presently joining the branches of the two lower dorsals, it grows larger: then descending between the psoas muscle and the neighbouring tendons of the lesser muscle of the diaphragm, just at the extremity of the os sacrum, the left and right join,

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and

114 COLICA PICTONUM ; or,
and send small branches to the muscles
of the rectum, os coccygis, together with
the last nerves of the os sacrum.

To set this matter in a still clearer
light, we are to observe, that all the
nerves issuing out of the ganglions being
higher in color, and softer in consistence
than those that enter into them, put off
the coat they received from the *dura me-
ninx*, and assume a new one softer than
that the ganglions supply them with ; by
which they are equally defended in their
progression as by the former: and en-
creasing in number as they issue forth,
having entirely lost the membrane which
had originally connected them together,
they spread themselves on all sides into
many branches like the *radii* of a circle
from its center.—For thus the *meseraic*
ganglion diffuses nervous branches to all
the intestines, but the semilunar ganglion
to the liver, spleen, kidneys, as well as
to all the abdominal viscera. Below the
gan-

ganglion, the softness and tenderness of the nerves in the abdomen, where they are safely lodged, arises from their lying soaking, as it were, in a vapor bath; and nature therefore has formed ganglions no where but in the abdomen, or within the bones where the nerves, lie concealed: the rest of the nerves, being defended by the coat of the *meninx*, are without ganglions. This neurological digression, throwing great light on the diagnostic of this distemper, accounts for all its *phænomena*, and points out the true theory of convulsions and epileptic shocks *.

Wepfer's admirable observations concerning the consent of the nerves, and the convulsions, which infants newly born are subject to, from an acid contained in their tender stomachs and bowels, evidently demonstrate this matter. The

* See *Eustachius*, Tab. xviii. *Albinus*, and *Vieussens's* Neurographia, chap. 5. Tab. xxiii.

whole human frame must suffer convulsive spasms whenever the *meseraic* nervous *plexus* is irritated.

It would greatly raise our admiration, if we considered the consent of the parts, even the most remote, with the part affected : how often do we observe a difficulty in deglutition, attended with a convulsion of the *musculi adducentes* of the lower jaw, a *spasmus cynicus*, and a locked jaw, several days after *castration* and the *herniotomia*? Blisters applied to the soles of the feet have been frequently known to relieve epileptics.

C H A P. XXI.

Nature sometimes performs the Cure.

DROET says, that the nuns of a certain monastery owed their safety to their quitting the place entirely.

Citefius observes, that all the monks and capuchins he sent away from *Poictou*, were perfectly restored, without the assistance of medicine.

Wepfer relates the case of a person who had lost the use of his limbs, but recovered perfectly, tho' medicines had in no shape whatever been administered. But, what is almost incredible, declares he once observed a palsy cured by a spontaneous bilious diarrhæa. This very remarkable observation is not confirmed by the authority of any one physician to my knowledge: a symptom so little agreeing with the nature of this disease, and so

repugnant to every phænomenon, that nothing could engage the belief of it, but the known candor and undoubted authority of so great a physician. I confess, for my own part, I never, during the long course of my practice, saw or heard of the like. But I have very frequently seen unhappy objects, upon their return into *Europe* from *Surinam*, after having suffered greatly from pain and loss of limbs, who soon after their arrival quitting the shore, and getting into a fine country air, have recovered surprizingly fast.

C H A P. XXII.

Of the Cure of the COLICA PICTONUM by Art.

ALL that I have related with regard to the various remote causes of the COLICA PICTONUM being duly considered, and that too supported by the observations of men of the first eminence in the profession, as well as corroborated by my own experience, who can vainly imagine that the same method of treating this distemper will answer every contingency? Reason, as well as experience, will undoubtedly direct us to have an eye to every remote cause; if the proximate cause were only attended to, I much fear the cure would be unhappily managed. One and the same medicine cannot possibly succeed where there are so many differing causes, which most assuredly de-

mand different treatment. In order to proceed methodically, I shall endeavour to point out a cure adapted to every remote cause.

C H A P. XXIII.

Of the Cure of the first remote Cause.

TH E acrid bile long retained in the liver and its adjacent parts, and diffused all over the mesentery and intestines, contracting a still sharper acrimony from its lodgment, vellicates the nervous parts, and irritates the nervous plexus. If it penetrates into the cavity of the abdomen, it abrades the defending mucus, denudates the papillæ; these being irritated will produce the most obstinate spasms in the secretory and excretory organs, attended with constipation of the bowels, colic pains, nausea, and

vomiting. The exhaling vessels and mucous glands so necessary to defend the papillæ being crisped, the mucus and moisture will be wanting, and consequently a palsy will ensue upon the colic. In the progress of this disease, the effect of which is loss of strength, bleeding will certainly be injurious, and so indeed will be strong purges, which, like vomits, act by irritation: all irritating medicines, whether internally or externally applied, are hurtful. The spasm is to be removed, and the morbid matter gradually to be conveyed from the relaxed emunctories, downwards.—By this easy method the convulsion will be removed; in consequence of which the belly will be soluble, internal perspiration restored, and a mild lubricating mucus regenerated.

The belly should be fomented with an emollient foment, and a very soft cataplasm; lenient clysters should be thrown up every two hours. Flowers of the most emollient

lient kind, barley, crumbs of bread, oatmeal, flowers of marshmallows, mallows, linseed oil, fresh butter, afford the readiest and simplest materials for that purpose. These are to be very frequently and copiously repeated. Semicupia are of infinite use, whether prepared with warm water, or milk and water. The electarium e casia cum mannâ, mixed with an equal quantity of oleum amygdalarum dulcium, is the best purge that can be given.—If the patient takes two or three drachms of it in four ounces of warm whey, every third or fourth hour, he will probably find happy effects from it about the third day, the belly then generally becoming soluble : repeated experience authorizes this method, as it has proved successful, and is therefore adopted by most gentlemen of the faculty. *Citesius* incautiously administering rougher purges, was soon convinced of his error, upon finding they produced immense pain;

pain ; and had recourse to the milder medicines, such as oil of olives, almonds, solutive syrup of roses, &c. these he continued for many days together, and it perfectly answered his intentions.

By this method the colic pains will be greatly relieved : opiates in this case are not to be meddled with, for they only deceive the patient as well as the physician. Convulsions arising from a sharp, acrid, viscid and glutinous matter, differ from those occasioned by other causes ; the effects of opiates in the former case most surprizingly aggravate and prolong the disorder.—If the patient was not costive before, he is rendered so by opiates, and this must be prevented as much as it is possible.

When once the belly is rendered soluble, we should have recourse to plentiful draughts of good fresh whey, if it is to be had, in order to prevent a relapse,

relapse, mild saponaceous juices, without salt, have their use.—All acrid substances are to be avoided; the juice of water pimpernel and dandelion are very excellent.

Then, and not before, are the parts to be dipped in some medicated spring, in order to strengthen and recover their tone; the acidulæ are best: by these, in case any peccant matter still lies lurking, will the parts be perfectly braced up.

C H A P. XXIV.

The Cure of the second remote Cause.

WHETHER the stomach and bowels be injured by wine sweetened with litharge, by water impregnated with cerufs, or by subtle poisons swallowed down, the effects will be equally dangerous.

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The mucus and sphincterulæ of the absorbent, exhaling, and lacteal vessels of the glands, the papillæ deprived of the gastric enteric juice, and lubricating mucus, are irritated; this irritation spreading to the mesentery, affects the nervous plexus; these draw the whole genus nervosum into consent, upon which follow convulsions, attended with all the above related symptoms.

This disorder frequently attacks persons without any previous indisposition; nay, sometimes they are suddenly seized with the most alarming symptoms, tho' they were seemingly an instant before in the most perfect good health. In this case, if the patient be plethoric, bleeding, even repeatedly, is allowable; but if the patient be weak, omit it absolutely.

In the very beginning vomits may be of service, but they are hurtful afterwards: where they are proper, they are preferable to the rougher purges, which

which are more irritating, yet more doubtful in their effects ;—the hurry of spirits excited by vomits, an opiate will easily quiet.

Soft emollient epithems, cataplasms, and fomentations, should be instantly applied to the abdomen, and relaxing oily clysters repeatedly thrown up. Semicupia are of great use. After the opiates, gentle and easy purgatives, such as mentioned above, should be administered, by which the bowels will be rendered soluble; the rougher purges, on the contrary, would rather constipate. Whey, or milk and water, may be drank freely. Milk, whether of an ass, mare or goat, is our excellent antidote, and will often perform the cure without any other medicine.—*Citesius* knew its happy effects in this case, and *Fernelius* confirms it by his own experience and observation.

If, notwithstanding all this, the pains should continue violent, apply acrid blisters

sters to the legs and feet: for, of two pains, we had better submit to the least. It is scarce credible how immediately patients are relieved by blisters. *This I know to be a certain truth, from what I have myself seen in several cases.*

C H A P. XXV.

Cure of the third remote Cause.

THE juice of most fruits newly pressed contain an essential acid salt, by so much the thicker and more copious, by how much sourer the fruits are—these are very hurtful in the gout and rheumatism. The mucus of the bowels washed away by their saponaceous quality, will lay the nerves bare. The bile itself becomes corrupted, hardens, and stagnating in the liver, is a farther cause of irritation.

Long before this distemper shews itself by the violence of pain, the patients become languid, weak, pale, and cachectic; the red part of the blood is gradually impoverished: there is little room in this case, to suspect a plethora.— Who would attempt bleeding, strong vomits, or rough irritating purges? The distemper moves on gradually, nor breaks out till it has first taken very deep root. The bile, the chief cause of this sharp disease, rendered more acrid by its lodgment, admits of no rough methods, which would greatly injure the friable substance of the liver, the adjacent nervous parts, and hepatic plexus, which is very irritable. Laxatives alone should be given, for irritating medicines would but bring on constipation. However, in order to dislodge the bile from the liver, we may venture upon a grain or two of tartar emetic, diluted in a pretty large quantity of water; but it must be done
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with care and prudence; after which exhibit an opiate.

Mild and emollient fomentations relieve the most obstinate spasms, oily and soft cataplasms and clysters repeatedly administered are of infinite advantage. In case the patients be weak, languid, and pale, abstain from semicupia.—I twice saw œdematous swellings happen in consequence of such treatment. *R.* Syr. ros. solut. \mathfrak{z} i. Ol. Amygd. d. \mathfrak{z} iiij. v. o. q. f. f. linctus, cochlearia duo larga omni bihorio; this is a pretty eccoprotic, grateful, and pleasant, and will fully answer the purpose intended. A spoonful of oil of olives has often answered most surprizingly: water-gruel, or barley water, sweetened with syrup of marshmallows, constitutes an agreeable, as well as wholesome, beverage.—The acid in the first passages entirely disclaims the use of acescents. If the body be open, and the pains relieved,

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veal

veal broth boiled with barley will be proper, even milk will be safe and commendable, of the lighter sort, provided it be mixed with *Selter* water.

We should pursue this method for some time, so as to dislodge the bile entirely from every part of the liver. Chalybeate waters, and riding on horseback, continued for a full month at least, will contribute greatly towards the cure. Under these circumstances we should be extremely careful how we direct blisters.

C H A P. XXVI.

Cure of the fourth remote Cause.

THE finer parts of the blood being vitiated and conveyed into the smallest vessels and nerves, when once they reach the abdominal viscera, and affect the sympathetic nerves, will bring on nausea, anxiety, vomit, belching, pain, convulsions, and a long train of ills, which accompany the colic, and often the gout, or rheumatism, brought on by the same cause, though in a less degree. They both destroy the nerves, cause intolerable pain, and after a long series of misery and torture, end in a palsy.

If the patient be of a full, plethoric habit, and strong in constitution, bleed; otherwise decline it.

Sharp purges in this case are dangerous; vomits almost absolutely fatal: the

subtile irritating humor should be repelled towards the skin and extremities—. How many have died by the unskilful management of empirics, by the preposterous use of the lancet, and of the rougher purges, &c. !

Large blisters should be immediately laid on the calves of the legs, which should be kept open ; next apply cupping glasses to the soles of the feet, which repeat night and morning ; after these are removed, clap on plaisters of galbanum. The thighs, legs, and feet, should be gently and warmly fomented, and the upper parts should also be kept moderately warm.

The abdomen should be covered with a dry, warm, and soft bag, stuffed with camomile and elder flowers, and this should be renewed every three hours, day and night constantly.

The intestines should be moved with lenient clysters, and mild eccoprotics ;
though

though the bowels indeed are of themselves sufficiently soluble, provided the convulsions be removed.

Milk and water, milk of asses, mares, or goats, are of excellent use; there is not a disease in which it is more happily given than in this.

When the pains are eased, in order to recover strength and restore the tone of the intestines, a glass of a smooth generous wine may be allowed, given in frequent but very small quantities: all sharp, acrid, or saline things must be avoided.

Riding on horseback is very instrumental towards a recovery, provided the air be neither damp or cold.

The body should be so cloathed or covered as to promote an equable perspiration. Relapses frequently happen from an obstructed perspiration.

C H A P. XXVII.

Cure of the fifth remote Cause.

WHEN the contents of the abdomen are constringed with cold, and the perspirable excrementitious humor is repelled upon the viscera, it injures the mild juices, which defend the nervous papillæ, by its acrimony; and brings on enormous colic pains, together with all the melancholy consequences which attend that disease.

Tho' strong constitutions may frequently surmount these mischiefs, weak and puny ones will be greatly tried by them. Bleeding, therefore, will seldom be indicated, though it may sometimes be necessary. In this case it is the business of a prudent physician to consider the state of his patient's strength and urgency of the symptoms, before he has recourse to
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the lancet. Rough purges and strong vomits are very injurious. They irritate, and consequently aggravate the spasm, which brings on a terrible train of symptoms, and an universal convulsion. The mildest oily eccoprotics are here requisite. Blisters, and those pretty large ones, should be immediately applied to the abdomen, and kept on according to the exigency of the disorder : cupping glasses also are of great use. Emollient clysters, with the infusion of camomile flowers, are to be injected frequently.—A half grain of opium, and one grain of camphire, may be safely given every three hours, in case the pains be violent, with a large draught of an infusion of saffrafras. Warm sulphur baths are here of excellent use, and preferable to every other application, and lastly great care is necessary to promote perspiration.

C H A P. XXVIII.

Cure of the sixth remote Cause.

ALL the humors being greatly hurt by a salt, alkaline acid, and scorbutic acrimony, will bring on the most horrid pains of the limbs, and violent colics, attended with a total relaxation of the limbs. There is not perhaps a disease so obstinate or so difficult of cure as this: for it is not only that the mucus of the bowels is abraded as in other colic complaints, but the very humors which constitute this mucus are vitiated and entirely destroyed. It must be observed, that it is the very nature of the scurvy to destroy the mucilaginous parts of the blood, and to obstruct all the mucous glands of the body in their office. Hence the stiffness of limbs, more especially in their articulations, and sharp darting night pains.

Physicians universally agree that bleeding in this case is destructive: experience farther confirms this practice ; for the vapid acrimonious humors easily putrifying, the more they are robbed of their red parts, the more do they become acrid and putrescent. Nor must we be misled by the florid countenance of some scorbutic people, which seemingly denotes a plethoric fulness ; nor is it much to be wondered at, that scorbutic patients frequently become hydropic.

Here we are to have repeated recourse to oleaginous, soft, and emollient fomentations, with which the abdominal parts are to be thoroughly well fomented. All acrid and rough purges are of bad tendency ; for the mucus, which defends the nervous papillæ of the tunica villosa, is not only deficient, but whatever still remains of it in the first passages is so acrimonious, as surprizingly to irritate the nerves, and by that means to convulse the
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138 COLICA PICTONUM ; or,

genus nervosum of the intestines by consent.—The best remedy is manna, cassia, and oleum amygdalinum, to which may be added occasionally some gum tragacanth, gum arabic, &c. drinking upon it some fresh whey.—And this should be continued till the belly becomes soluble.

Though blisters are not absolutely necessary, especially while the violent pains continue, yet are they not entirely to be laid aside ; for while they are kept open, they relieve the violence of the pain, and act as issues, by draining off the noxious humors. A spontaneous supervening ulcer of the leg has often relieved this disease. The pain once surmounted, our next business should be to cure the scurvy, and prevent a relapse: for, unless we remove the cause, the effect must necessarily remain. To treat this disease properly and with judgment and success, is far from being an easy task; and the difficulty

ficulty chiefly arises from its being endemic. The hydra's head will be for ever springing up a-new.—Change of air and climate is more particularly necessary in this disease.

Medicated springs may for that very reason have their use, especially when drank at the fountain head.—The air at those places is, in general, more healthy, gives vigor to the patient, and contributes greatly to the virtues of the water; the chalybeates are the best.

C H A P. XXIX.

Cure of the seventh remote Cause.

A Mixture of earth with the thick oily substance of the blood, deprived of its most benign parts, is the principal cause of melancholy: this, by its tenacity and acrimony, whilst it is lodged in the hypochondriac vessels, mesentery,

sentery, and intestines, continually irritates the nerves, and is productive of the most terrible spasms and obstinate excruciating pains. It is, however, observable that colic pains in melancholy subjects, are not so sharp, though the sense of oppression and anxiety is very great. I have seen many, who, tho' they scarce ever complained of pain, yet after long continued anxiety became paralytic. May not this happen because the nerves proceeding to the intestines (the papillæ remaining uninjured) are in a continual spasmodic state, and therefore almost lose the sensibility of any stricture? This is very certain that the pain is nothing equal either to the constipation of the bowels or palsy.

Bleeding is very useless here; and as the cause is not recent, rough purges must be avoided, forasmuch as they greatly irritate the nerves, excite perturbations, at the same time that they do not carry off

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the *pitchy* matter. Vomits are equally noxious. An emollient fomentation with soap should be applied to the whole abdomen; and a smooth oily clyster with a small quantity of honey frequently repeated.—Gentle eccoprotics, joined with the juice of beccabunga, or some such like saponaceous juice, should be administered, provided the nausea will permit it. If there be a slight acrimony it may be easily removed by directing draughts of whey mixed with the syr. ros. solutiv. Whey is of great excellency in this disorder. Direct warm baths, in which let the emollient herbs be boiled, with a light solution of soap.

If notwithstanding this, the patient still continues costive, rub the whole abdomen with the unguent. arthanitæ every three hours, proceeding at the same time in the same manner with the abovementioned things.

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When the body is soluble have recourse to the warm acidulæ, exercise on horseback, and constant friction, especially of the abdomen.

C H A P. XXX.

Cure of the eighth remote Cause.

THE passions of the mind have an amazing effect on the very tender and delicate bodies of hypochondriac and hysteric people, whose nerves are so very irritable as to constrict the exhaling and inhaling vessels of the membrana villosa, and prevent secretion and excretion. The papillæ, deprived of their lubricating mucus, will be surprizingly irritated, and bring on epileptic fits, and this more particularly if they have been much hurt by brisk and acrid medicines. Bleeding in this case would be immediately fatal, rough purges and vomits highly dangerous, great caution is here very

neceffary. The mind as well as the body fhould be kept extremely ftill and quiet, and the patient moved into a dark room free from all noife : opiates are neceffary in order to calm the too much hurried fpirits.

Warm pediluvia, plaifters to the foles of the feet, and cupping glaffes, are very neceffary and proper, and fo are warm and emollient fomentations, both internal as well as external, applied to the abdomen.

In cafe of convulfive twitchings, blifters may be laid on the calves of the legs ; but they muft not be very fharp, for the very acrid falts of the flies, fhould they penetrate too deep, would irritate the delicate tender nerves too much, and fo bring on the very pains we ought to prevent.—This may appear extraordinary to the young unwary practitioner, but experience, nevertheless, enforces the truth of this obfervation.

Asses milk, and milk and water, should be drank constantly, in which universally dissolve small quantities of very pure manna. When the belly is soluble, exhibit paregorics sparingly : the least error now becomes of consequence.

Lastly, strengthen the nerves with balsamic, nervous, though not spirituous medicines; direct the resin of the bark with sugar in small doses, and those often repeated, drinking asses milk upon it.

C H A P. XXXI.

The Cure of the Palsy.

IF the pains become either naturally or artificially more chronic, and the convulsions continue, for want of that very fine vapor exhaling between the nerves and their coverings, the more distant nerves will gradually harden, in like manner as the tendons, which, being dry,

dry, adhere to the coats, and become rigid and motionless ; and thus they both of them lose their organic action.

The relaxation of the limbs in the scurvy, which so frequently occurs, arises from a deficiency of the lubricating juice of the nerves and tendons ; this clearly accounts for the proximate cause, successive progress, and different gradations of the palsy.—Hence also we are made to understand why a palsy is so difficult of cure, and why often incurable.

The above instituted method will not effect a cure in this case ; for tho' every thing that ought to have been done with respect to the abdomen has not been wanting, we shall still find the nerves and injured tendons by no means restored, and the limbs continue relaxed ; and tho' the cause of the *colic* be overcome, yet are the effects to be cured by some different means.

If the case be recent, and has not taken too deep root, we may restore the organic powers by emollients, fomentations, friction, motion, vellicants, concutients, &c. Wrap up the limbs in the hot smoaking entrails of animals. This warm fatus, which is superior to any other, should be frequently repeated. Sulphur baths are most admirable: the waters of *Bath* both internally as well as externally used, are of wonderful efficacy in almost every symptom of the COLICA PICTONUM ; but in the palsy arising from it more especially. This is happily experienced by numbers of patients who resort hither for that purpose, and is further illustrated by the books of our *hospital*, where I find in the year 1762 *nine cured, eleven much better*; in the year 1763 *twelve cured, seven much better*.

It will not, I hope, be thought improper here to observe the difficulties, the *physicians*, as well as the *springs* lie under

under from the *ill-managed* or *ill-advised* method most people pursue at this place, who stint themselves to time, which they measure out as they do their glasses : and if (as indeed no other can be well expected) no immediate benefit arises, the *doctor* and the *waters* are charged with the consequence. *Chronic cases* require *patience* and *perseverance* : our waters are *specifically*, not *miraculously* salubrious.

The second difficulty is, that people are sent hither too often in the very last stages of the disease. Aretæus very justly remarks, εν τῇσι χρονίῃσι νοστοῖσι, ἡ ἀμβολὴ τῆς ἰντρεινῆς, κακόν. ὑπ' ἀμβλακίης γὰρ, οὐκέλλει εἰς ἀνήκεστα παθεῖν. Φυσίως αὐτῷ δὲ ἰσχύει, ὥς μὴ ρῆϊδιως ἀποφοιτῆσαι, ἢν ἐσβαλλῇ, ἀπαξ. ἢν δὲ καὶ ἐκδηθῇ, χρόνῳ καρτερεῖ εἶναι, καὶ ξυναποθνήσκειν γίνεται ποτε. Καὶ τὰ σμικρὰ μεζόνων ποιεῖται διαδέξιαι. κιν το πρὸςθεν εἰς κινδύνον ἀσίνες ἢ, οὐ τοῦτ' ὅτι τῶν δὲ γίνεται οὐλεθρίῳ. Χρησθῶν, μὴτε τὸν νοσεόντα σιγῇ, ἢ αἰδοί τε ἐλεγχῇ τῆς νόσου, μὴδὲ ὑποδιδρῆσκειν δεῖ τῆς ἰντρεινῆς. μὴτε τὸν ἰντρον καταμβλακνεῖν. ἀμφὸς γὰρ εἰς τὸ ἀνήκεστον ξυναδού. Μετεξέτεροι δὲ τῶν καμνόντων. ὑπ' ἀγνώσεως τε τῶν παρόντων, καὶ τῶν αὐθις

εσομενων, ες τέλος ξυνδιαιτεονται τη νεσω. επι γαρ τοιςι πλειουσι, ετε ολλυνεονται, ετε ορρωδεσι θανατον* δια τα δε ων ιιτρω σφεας αυτες εδ' επιτρε-
 πεισι——*.

“ It is wrong, says he, in chronical disorders to postpone medicinal application ; for by such delays the patient may contract so bad a habit, as to become incurable : and it unfortunately happens, that when these diseases have once taken hold, they seldom are removed, and this more particularly if they have been too long neglected, for they then take such root, as must necessarily end in death. Thus diseases trifling in themselves (in the beginning) are productive of very dangerous consequences, and tho’ they at first have no threatening appearances, they will in time inevitably destroy the patient. It is incumbent, therefore, on every person so afflicted, not to suffer *modesty* or *fear* to get so much the better of

* Χρονικων παθων βιβλ. α. προσμιμον. κεφ. α.

them, as to conceal their disorder, and to neglect timely assistance; and it is likewise the *duty* of the *physician*, as soon as he is applied to, to use every possible and *direct means* to relieve his patient; an error in either of these cases, must be attended with very disagreeable circumstances. It sometimes happens indeed, that the patient is under no apprehensions (as he feels no pains or ill-convenience) from his disorder, and therefore is in no haste to call in his physician."

Can there be any thing more absurd and ridiculous than to expect, that a disorder, under which we have laboured for many years, should be removed in as many weeks? And that probably after the body has been harrassed and enervated by long, tedious, and excruciating pains?

In order therefore to render these waters effectual, (so far as human art can effect it) the patient should be determined in his resolution, not only to be *well advised*,
but

but to be guided by *that advice*.—He must at the same time divest himself of every consideration of business, fully intent upon his thorough cure : what *one* month will not effect, *two* may, and so on in proportion to the nature of the disorder, and its *previous duration*. To this it may be objected ; that many people have it not in their power to acquiesce in this, their vocations, or circumstances not admitting of a very long stay.—Such indeed are to be pitied ; but they had better *not come*, than put themselves to unnecessary expences, in pursuit of *half recoveries*, or rather *no recoveries at all*. I would not be understood to mean this in *all Bath* cases, but in such only as have been of a very considerable standing, and where the poor patients may truly, and in the full extent of the word, be said to be *invalids* : another caution I would recommend to *these*, is, not to come during the very cold months ; *April, May, and June,*

the latter end of *August*, all *September* and *October*, are the properest seasons for them. It is needless to say more upon this subject, which has already been so sensibly treated by my very learned and ingenious friend doctor OLIVER.

Forestus declares, that after trying various methods, he never found any answer so well, in a palsy occasioned from the COLICA PICTONUM, as the water of *Aix*. Friction with napkins or flannels, which are not too coarse, cannot be too much insisted upon, as they are of infinite service.

Twice a day or oftener, if the patient can bear it, rub the limb with the unguent. nervin. or martiat. with the addition of balsam peruv. Oily liniments I prefer to the spirituous. The gums long continued and repeated in small doses have wonderful good effects, such as galbanum, sagapenum, opopanax, ammoniacum, joined with the balsam. e Mecca, or Peru. Smooth,

Smooth, generous and balsamic wines, given sparingly, are of good use, such as Canary, Madeira; but the Greek wines are by much the best. Nothing, however, is more effectual than a change of air, provided it be dry, temperate, and healthy. A cold and moist air would be hurtful.

F I N I S.

E R R A T A.

P. 23. l. last, for *many convents*, r. *several convents*, p. 41. l. 16. r. *eight days*. p. 49. l. 11. for *immensely* r. *extremely*. p. 54. l. 6. for *tremor* r. *tremors*. p. 66. l. 4. r. *hale*. p. 72. l. 21. r. *affect*. p. 75. l. 14. r. *transudes*. p. 76. l. 5. r. *attended*. p. 77. l. 9. r. *and contracted*. ~~disso~~ l. 20. for *lay* r. *lie*. p. 83. l. 15. r. *the whole contents*. p. 88. l. 9. r. *attended*. p. 99. l. 14. r. *renal*.

